

METAL

GRIT GX/GI

- ▶ Belt grinders
- ▶ Grinding modules
- ▶ Deburring machines
- ▶ Accessories

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**Belt grinding for professional users
in engineering trades and industry**



GRIT – The brand for belt grinding from FEIN

Developing problem solutions for metal processing – therein lies one of the core competences of FEIN. GRIT has set standards in the belt grinder segment for 25 years. By taking over the GRIT brand, we expand this competence area even further. And you profit from the comprehensive know-how that is at the heart of two leading brand manufacturers.

GRIT by FEIN – these are belt grinders that are optimally adapted to their tasks. And that means for FEIN not just “One for All.” GRIT by FEIN offers the optimal solution for each requirement – with our unique modular system: powerful basic belt grinders and mounted modules that are specified to the task and cover the entire spectrum of the application range – and that is specialised for all applications in trade and industry.



GX – for use in the workshop

Constructed for operation in manual trade or for small series production, the GRIT GX programme stands out especially due to high efficiency: Whether for rough grinding or surface polishing, with GRIT GX machines you work with speed and with high quality. GRIT GX machines can also be quickly converted from one task to the next, are reliable in operation, and constructed really robustly. The complete GRIT GX Programme can be found on pages 4 to 15.

All technical data provided by this brochure refer to the models in 400 V, 3 ~, 50 Hz. There may be a few deviations of the given voltage and frequency values for the respective country-specific versions.

Your benefits:

- ▶ Optimal for use in the workshop and for small series production
- ▶ Covers all standard grinding tasks: Belt, radii and cylindrical grinding
- ▶ Quickly installed, quickly converted, because they are easy to assemble
- ▶ Great work safety and machine reliability
- ▶ Professional working results because of professional equipment and accessories



GI – for use in industry

Industry puts especially high demands on belt grinders, from series production up to extremely harsh applications. The GRIT GI programme is designed especially for that: All grinders are equipped with extremely powerful motors; even longer operating times and high loads are no problem for the robust construction. The simple handling increases the efficiency as well as the reliability. The complete GRIT GI Programme can be found on pages 16 to 33.

All technical data provided by this brochure refer to the models in 400 V, 3 ~, 50 Hz. There may be a few deviations of the given voltage and frequency values for the respective country-specific versions.

Your benefits:

- ▶ For the industrial processing of steel, stainless steel and non-ferrous metals
- ▶ Suitable for all common workpieces and grinding applications
- ▶ Construction and parts are optimally adapted to heavy duty jobs
- ▶ Especially economical because of high abrasion performance for professional working results
- ▶ Great work reliability and simple operation
- ▶ Special solutions for special applications available

Robust, flexible, cost-effective. In short: GRIT GX

If you work on steel or stainless steel every day, then the GRIT GX belt grinders are the right choice. Twenty-five years of experience and know-how have flowed into GRIT – this shows itself for instance in the especially flexible design, in the high machine reliability and in the optimal adaptation to materials and applications – from rough grinding to mirror polish.

The GRIT GX functions according to the building-block principle. This means that you operate a belt grinder as a basis – and extend the performance spectrum as needed simply with additional modules, e.g. for round or radii grinding. This saves effort, time and money. Grind efficiently – with the GRIT GX programme.



1. Belt grinder GX 75/GX 75 2H



High-performance belt grinder in one- or two-speed models – the heart of the modular GX programme. Even stand-alone employable as a fully-fledged belt grinder.

4. Deburring machine GXE



Independent addition to the GX program for the deburring of steel and stainless steel workpieces with wire brushes. Also available with machine base.

2. Pipe notching grinding module GXR



Extension module for the “Radii grinding” application of various workpieces such as pipes, square pipes, flat material and profiles.

5. Accessories



The range of accessories for GX belt grinders – from high-quality grinding belts to cooling lubricant module.

3. Centreless grinding module GXC



Extension module for the “Rounded materials grinding and polishing” application – from rough grinding to mirror polish.

GRIT GX: One system, many jobs

Deburring, grinding, cylindrical and radii grinding: to cover the entire spectrum of working with steel or stainless steel you need a broad range of machinery – or the GRIT GX programme. Because it always provides you with as much machine as you currently require – if your requirements change, so does your machine.



The system that grows with the requirements

The GRIT GX programme is modularly designed. By attaching the appropriate modules you can quickly transform a basic belt grinder into a cylindrical or radii grinding machine. Real easy, real flexible. That saves long changeover times, a lot of space, and the investment into a complete machine outfit.

GX 75/GX 75 2H

Belt grinder (basic unit)
7 901 01 / 7 901 02



GXR

Pipe notching module
9 90 01 001 00 0



Pipe notching machine

GX 75/GX 75 2H

Belt grinder (basic unit)
7 901 01 / 7 901 02



GXC

Centreless grinding module
7 901 03



GXW

Cooling lubricant module
7 901 04



Centreless grinding machine

The perfect base: Belt grinder GX 75 / GX 75 2H

GX 75 or GX 75 2H is the basis for the system. A powerful belt grinder on which you can rely for professional applications: robustly built, easy to assemble, and equipped with everything that eases the work and the operation.



GX 75 / 75 2H

- ▶ Robust AC motor provides grinding with steady speed
- ▶ Speeds optimal for metal working: GX 75 with 3,000 rpm; GX 75 2H switchable to 1,500 or 3,000 rpm
- ▶ Processing suiting the material by self-adjusting belt tension
- ▶ Comfortable operation by adjustable work level, height-adjustable support for plane grinding, and easy belt adjustment
- ▶ Great work reliability because of sturdy machine base and solid cutting table
- ▶ Connector integrated for dust extractor (Ø 90 mm)
- ▶ Detachable swarf collector

Technical data

	GX 75	GX 75 2H
Power	3 kW	1.5/2 kW
Speed	3,000/min	1,500/3,000/min
Belt size	75 × 2,000 mm	75 × 2,000 mm
Connecting cable	2 m	2 m
Weight	75 kg	75 kg
Part number:	7 901 01	7 901 02
Included in delivery: 1 CEE plug, 16 A; 1 grinding belt 75 × 2,000 mm, grain 36 Z		



1. Versatility for every job

The great power output of the motors provides the GX 75 belt grinders with outstanding capacities. High grinding capacity in brief time is thereby guaranteed – just as comfortable working. The GX 75 and the GX 75 2H are especially low in vibration during operation and facilitate exact working thanks to its patented belt tensioning system.

Whether grinding, weld seam polishing, chamfering, deburring, or plane grinding – with GRIT you always work optimally. And therefore also especially cost-efficiently.



2. Optimally working in the plane

Plane grinding is part of the standard features of the GRIT. A large grinding area of 75 × 420 mm is just as standard for both GX 75 machines as a height-adjustable plane grinding table and the easy belt adjustment.

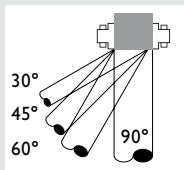
Everything simply fits together: Pipe notching module GXR

Grinding exact radii on pipes is a question of the right machine: By attaching the GXR module, a GX 75 2H basic unit belt grinder converts into a professional radii grinding machine in just a few steps – standard-equipped with depth stop, traverse carriage, and quick-clamping. Grinding down for precision fitting becomes so easy – and much more user-friendly.



GXR

- ▶ For precise grinding of profiles and pipes from \varnothing 16–75 mm
- ▶ For angles of 30° to 90°
 - 30° / max. \varnothing 37,5 mm
 - 45° / max. \varnothing 53,0 mm
 - 60° / max. \varnothing 64.5 mm
 - 90° / max. \varnothing 75,0 mm
- ▶ Precise and user-friendly working by integrated depth stop and vice with fast-clamping for round and square pipes as well as solid material
- ▶ Contact rollers are available in all common sizes
- ▶ Vice with stainless steel clamping jaws
- ▶ In combination with GX 75 2H: Low speed (1,500 rpm) optimal for processing stainless steel. Less burrs and tarnish.
- ▶ Easy handling by four easy-to-steer transport casters
- ▶ Can also be combined with the GI programme (GI 75/GI 75 2H). The adapter 6 99 02 186 00 0 is required for this.



Technical data

Diameter pipes	\varnothing 16–75 mm
Dimension profiles / flat material max.	75 × 75 mm
Belt size	75 × 2,250 mm
Weight	54 kg

Part number	9 90 01 001 00 0
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Included in delivery: 1 contact roller \varnothing 42.4 mm; 1 contact roller \varnothing 48.3 mm; 1 grinding belt 75 × 2,250 mm, grain 36 Z, 1 dust collector



GX 75 / GX 75 2H

Belt grinder
(basic unit)GXR
9 90 01 001 00 0

Pipe notching module



Pipe notching machine



1. Perfect fit at any angle

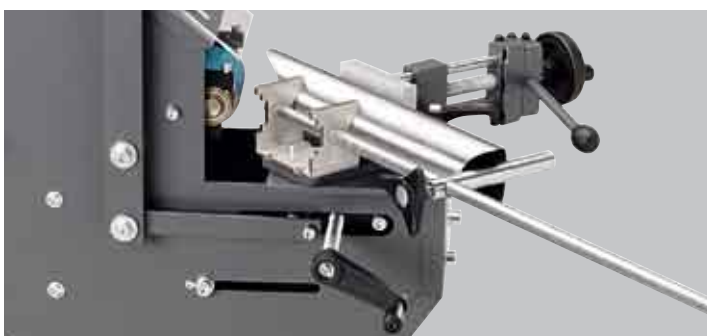
It makes no difference whether pipes, profiles, or solid material is being ground – the radii grinding module GXR is optimally suited for that. And that is a standard feature: for example with a traverse carriage that is precisely and quickly set to the required angle as well as a vice with stainless steel clamping jaws and unique fast clamping*. That guarantees precise and sure grinding.

(* patent applied for)



2. Custom fit contact rollers

Pipes sized $\varnothing 16-75$ mm and an attack angle of 30° to 90° can be ground to a perfect fit with the pipe notching module. The extensive GRIT contact roller selection reliably covers all usual pipe diameters.



3. With length stop for production in series

The retrofitable length stop for the GXR pipe notching module ensures consistently precise results in series production. It can be attached later and can be set along a length of 1,000 mm.

Really good, really fast: Centreless grinding module GXC

The GXC centreless grinding module allows for perfect surfaces in the simplest manner. The conversion to a “Centreless” cylindrical grinding machine is done in just a few steps. Efficiency and flexibility are apparent in the design and construction.



GXC

- ▶ For grinding of pipes and shafts from Ø 10–100 mm
- ▶ High process speed at highest surface quality
- ▶ Also suitable for wet-grinding in connection with the cooling lubricant module GXW
- ▶ Easy handling by 4 easy-to-steer transport casters
- ▶ Can also be combined with the GI programme (GI 75/GI 75 2H). The adapter 6 99 02 187 00 0 is required for this.

Technical data

Pipes	Ø 10–100 mm
Belt size	75 × 2,000 mm
Weight	48 kg

Part number 7 901 03

Included in delivery: 1 guide rail, nylon; 1 guide rail, brass, 1 connecting cable with CEE plug 16 A

GXW Cooling lubricant module

Weight 8.6 kg

Part number 7 901 04

Included in delivery: 1 litre cooling lubricant emulsion (1:30)



Belt grinder
(basic unit)



GX 75 /
GX 75 2H



Centreless
grinding
module



GXC
7 901 03



Cooling unit



GXW
7 901 04



Centreless grinder



1. Quick shiny results all around

Perfect surface quality and high process speeds on pipes and shafts are no contradiction for the GXC centreless grinding module. Even commercially available fleece belts can be used in connection with the GX 75 2H basic unit. The advance speed can be infinitely variably adjusted for the material; up to 2 metres per minute.



2. Always on the right track

Various guide rails are included in the scope of delivery that are tuned to the surface quality of the workpiece. The guide rail made of brass is made for rough surfaces such as corrosion, scale, etc., or for dry grinding. The nylon rail is the perfect choice for surface polishing and sensitive material.



3. GXW for wet grinding

There are several arguments for wet grinding using the GXW cooling lubricant module: The swarf is bonded immediately, cooling extends the service life of the grinding belts, the finishing results are noticeably improved and thanks to the reduced heat development during grinding the corrosion risk for stainless steel pipes is reduced. A closed circuit ensures sparing consumption of the coolant.

Finishes up the job neatly: Deburring machine GXE

An ideal addition to the GRIT GX programme: The deburring machine GXE completes the final task. It is highly effective for deburring pipes, profiles and flat materials. The broad spectrum of GRIT deburring brushes solves nearly all deburring jobs.



GXE

- ▶ For deburring pipes and profiles
- ▶ Connection for extraction option available
- ▶ Employable as polishing machine when using the appropriate polishing wheels
- ▶ High operational reliability due to integrated safety switch with motor protection
- ▶ Broad range of wire brushes available (see accessories)

Technical data

Power	2.2 kW
Speed	1,500 rpm
Tool dimension max.	Ø 250 × 60 mm
Connecting cable	2 m
Weight	32 kg

Part number 7 901 05

Included in delivery: 1 CEE plug 16 A

The secure main pillar: Machine base GIXS and GIXBE

With or without extraction – both machine bases are optimally suited for the GXE deburring machine. Easy to assemble, robustly constructed, and extremely sturdy. Machine bases can also be used for the GI programme (GI 100 and GIE).



GIXS/GIXBE

- ▶ Sturdy machine base made of steel plate
- ▶ Great steadiness because of bolting to the floor

GIXBE

- ▶ Integrated motor for highly effective double extraction
- ▶ Cassette filter for effective air cleaning
- ▶ Integrated metal swarf collector, resistant against hot sparks
- ▶ Flexible, heat-resistant steel suction hoses



Technical data GIXS

Dimensions (l × w × h)	304 × 356 × 769 mm
Weight	18 kg
Part number	9 90 01 002 00 0

Technical data GIXBE

Power	370 W
Max. vacuum	2.65 mbar
Dimensions (l × w × h)	305 × 575 × 700 mm
Weight	58 kg
Part number	9 90 01 009 00 0

For even more efficient working: Original GRIT machine accessories

There is one thing that all of our machine accessories have in common: They are perfectly tuned – to our machines as well as to your requirements of daily work. The GRIT machine accessories are not only convincing because of their special quality, but also due to a significant improvement of their efficiency.

The complete GRIT GX programme can be found on the following pages. GRIT Premium grinding belts with outstanding service life and abrasion performance can be found on page 33.



Accessories GX 75/GX 75 2H

Graphite coating

as a gliding base for plane grinding

Pack of 5

Part number 3 90 00 000 00 1

Contact wheel

grade 80 shore (extra hard)

Part number 3 90 00 000 00 5



Eye protection

Acrylic screen for protection, pack of 3

Part number 3 90 00 000 00 4

Accessories GXR



Stainless steel clamping jaws

replaceable, for vice when processing stainless steel, pack of 1

Part number 6 99 02 004 00 0



Length stop

Length 1,000 mm, infinitely variably adjustable, simple assembly

Part number 6 99 02 001 00 0



Contact rollers

Simple assembly, ball bearing mounted at both ends

Ø mm	Part number
16.0	6 99 02 020 00 0
17.0	6 99 02 021 00 0
17.2	6 99 02 022 00 0
18.0	6 99 02 023 00 0
19.0	6 99 02 024 00 0
20.0	6 99 02 025 00 0

Accessories GXR

Contact rollers

Ø mm	Part number
21.0	6 99 02 026 00 0
21.3	6 99 02 027 00 0
22.0	6 99 02 028 00 0
22.2	6 99 02 029 00 0
22.5	6 99 02 030 00 0
23.0	6 99 02 031 00 0
23.1	6 99 02 032 00 0
24.0	6 99 02 033 00 0
24.5	6 99 02 034 00 0
25.0	6 99 02 035 00 0
25.4	6 99 02 036 00 0
25.9	6 99 02 037 00 0
26.0	6 99 02 038 00 0
26.4	6 99 02 039 00 0
26.9	6 99 02 040 00 0
27.0	6 99 02 041 00 0
28.0	6 99 02 042 00 0
28.6	6 99 02 043 00 0
28.8	6 99 02 044 00 0
29.0	6 99 02 045 00 0
30.0	6 99 02 046 00 0
31.7	6 99 02 047 00 0
32.0	6 99 02 048 00 0
33.0	6 99 02 049 00 0
33.7	6 99 02 050 00 0
34.0	6 99 02 051 00 0
35.0	6 99 02 052 00 0
36.0	6 99 02 053 00 0
37.5	6 99 02 054 00 0
38.0	6 99 02 055 00 0
38.1	6 99 02 056 00 0
38.3	6 99 02 057 00 0
40.0	6 99 02 058 00 0
41.0	6 99 02 059 00 0
41.2	6 99 02 060 00 0
42.0	6 99 02 061 00 0
42.4	6 99 02 062 00 0

Contact rollers

Ø mm	Part number
42.6	6 99 02 063 00 0
43.0	6 99 02 064 00 0
43.3	6 99 02 065 00 0
44.0	6 99 02 066 00 0
44.5	6 99 02 067 00 0
45.0	6 99 02 068 00 0
46.0	6 99 02 069 00 0
48.0	6 99 02 070 00 0
48.3	6 99 02 071 00 0
49.0	6 99 02 072 00 0
50.0	6 99 02 073 00 0
50.8	6 99 02 074 00 0
51.0	6 99 02 075 00 0
53.0	6 99 02 076 00 0
53.7	6 99 02 077 00 0
54.0	6 99 02 078 00 0
55.0	6 99 02 079 00 0
57.0	6 99 02 080 00 0
58.0	6 99 02 081 00 0
59.0	6 99 02 082 00 0
60.0	6 99 02 083 00 0
60.3	6 99 02 084 00 0
63.0	6 99 02 085 00 0
63.5	6 99 02 086 00 0
65.0	6 99 02 087 00 0
67.0	6 99 02 088 00 0
69.0	6 99 02 089 00 0
70.0	6 99 02 090 00 0
73.0	6 99 02 091 00 0
75.0	6 99 02 092 00 0
76.0	6 99 02 093 00 0
76.1	6 99 02 094 00 0
76.2	6 99 02 095 00 0
80.0	6 99 02 096 00 0
82.5	6 99 02 097 00 0
88.9	6 99 02 098 00 0
90.0	6 99 02 099 00 0



Accessories GXR



Eye protection

Acrylic screen for protection, pack of 3

Part number 3 90 00 000 00 7



Water container

plastic, to douse sparks, complete with handles on the sides, capacity about 20 l

Part number 3 90 00 000 48 5

Connecting piece

Required for adapting the GXR module to a belt grinder of the GI programme

Part number 6 99 02 186 00 0

Accessories GXC



Guide rail, brass

For dry grinding and course material surfaces

Part number 3 90 00 000 49 6



Guide rail, nylon

For high surface quality

Part number 3 90 00 000 49 7

Connecting piece

Required for adapting the GXC module to a belt grinder of the GI programme

Part number 6 99 02 187 00 0

Accessories GXE

Steel brush

Ø 250 mm × 60 mm, with very high wire strength for especially efficient use, mounting hole, Ø 51 mm.

0.2 mm wire gauge for thin walled pipes and profiles. 0.35 mm wire gauge for universal employment. 0.5 mm wire strength for thick walled pipes and profiles and high deburring effectivity.

Steel model:

Wire gauge mm	Part number
0.20	6 99 02 006 00 0
0.35	6 99 02 007 00 0
0.50	6 99 02 008 00 0

Stainless steel model:

Wire gauge mm	Part number
0.20	6 99 02 009 00 0
0.35	6 99 02 010 00 0



Swarf bag

For collecting swarf, quick and easy attachment

Part number 6 99 02 005 00 0



Eye protection

Acrylic screen for protection, pack of 3

Part number 3 90 00 000 00 4

GRIT grinding belts can be found on page 33.

Accessories GXW

Cooling lubricant emulsion

Concentrated, 10 l, mix ratio 1:30, makes 300 l ready coolant

Part number 6 99 02 100 00 0

Further accessories



Flexible hose

For swarf removal, Ø 90 mm, 1 m long, steel, high heat resistance

Part number 3 90 00 000 00 2

Clamping band

For fastening the flexible hose

Part number 3 90 00 000 00 3



Dust collector

To douse sparks, metal lid for hose connection, plastic, with handles on the sides, capacity about 20 l

Part number 6 99 02 000 00 0

GRIT GI – for use in industry

Developed especially for heavy-duty work in industry, the GI programme stands out because of its power and efficiency. All elements are extremely robust; high loads and long service lives are therefore a standard feature of the GRIT GI machine – just as high operational reliability and simple operation.

1. Broad range of applications

GRIT GI machine process all materials and formats that are common in the metal industry: steel, stainless steel and non-ferrous metals – as flat, round or square materials. All grinding applications belong of course to the programme: Plane, cylindrical and abrasive grinding as well as sanding down, radii grinding, chamfering and deburring.

2. Constructed for industrial use

Professional application in industry has especially high requirements – and they are optimally met by the GI programme: Robustly constructed and equipped with extremely powerful motors, a GI machine always runs reliably, even in non-stop operation. Partially automated cycles make the task easier.

3. Quickly amortised

The acquisition costs for a GRIT GI machine are amortised quickly, because you can work quickly, in high quality – and thereby especially efficiently, particularly with automated work steps.

4. Economic

The GRIT GI programme is modularly designed: Depending on the application you can assemble the optimal machine – from the machine base with or without extraction and the basic machine to the grinding module. If the job situation changes, then a radii grinder for example is quickly converted to a surface grinder.



Modular machine programme

Belt grinding



Basic belt grinder

GI 75	7 902 01
GI 75 2H	7 902 02
GI 150	7 902 04
GI 150 2H	7 902 05



Machine base

GIB	9 90 01 003 00 0
GIBE	9 90 01 004 00 0



Belt grinder

Pipe notching



Basic belt grinder

GI 150	7 902 04
GI 150 2H	7 902 05



Machine base

GIB	9 90 01 003 00 0
GIBE	9 90 01 004 00 0



Module

GIR	9 90 01 007 00 0
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Pipe notching machine

Longitudinal grinding



Basic belt grinder

GI 150	7 902 04
GI 150 2H	7 902 05



Machine base

GIB	9 90 01 003 00 0
GIBE	9 90 01 004 00 0



Module

GIL	7 902 08
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Longitudinal grinder

Mobile application



Basic belt grinder

GI 75	7 902 01
GI 75 2H	7 902 02
GI 150	7 902 04
GI 150 2H	7 902 05



Mobile base

GIM	9 90 01 005 00 0
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Grinding mobile

Belt grinding



Basic belt grinder

GI 100	7 902 03
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Machine base

GIXS	9 90 01 002 00 0
GIXBE	9 90 01 009 00 0



Belt grinder

Standard machine programme

Belt grinding



Belt grinder

GIS 75	7 902 09 50
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Special machine programme

Centreless grinding



Centreless grinder

GICS	7 902 06
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The optimal base for any task: Belt grinders GI 75 and GI 150

The basic equipment for industrial belt grinding: the GRIT GI 75- and GI 150 belt grinders. Every component is made for hard professional applications. An exceedingly powerful motor keeps the speed constant and ensures high grinding performance. Available in 75 and 150 mm belt width as well as one- or two-speed version.



GI 75 (2H) / GI 150 (2H)

- ▶ High-performance belt grinders available either with 1 or 2 speeds and different belt widths (75 mm or 150 mm)
- ▶ Constant speed at high grinding performance thanks to powerful, robust motor
- ▶ Ease of operation: low vibrations, patented belt-tensioning system
- ▶ Great work safety: Stop, grinding gap, and eye protection can be adjusted individually
- ▶ Ready for connection also to central extraction systems

GIB / GIBE

- ▶ Work height can be adjusted conveniently by gas compression spring without effort
- ▶ Great steadiness because of robust construction

GIBE

- ▶ Integrated motor for highly effective double extraction
- ▶ Cassette filter for effective air cleaning
- ▶ Integrated metal swarf collector, resistant against hot sparks
- ▶ Flexible, heat-resistant steel suction hoses



GI 75 2H + GIB



GI 150 2H + GIBE

Basic belt grinder



GI 75	7 902 01
GI 75 2H	7 902 02
GI 150	7 902 04
GI 150 2H	7 902 05



Machine base



GIB	9 90 01 003 00 0
GIBE	9 90 01 004 00 0



Belt grinder




1. Full performance

An extremely powerful motor makes sure that the speed always remains constant during operation. The robust construction guarantees durable operation even under the toughest conditions. And with the appropriate modules both can be quickly and easily converted to radii and surface grinders.



2. Unrivalled neatness

The GIBE machine base with double suction captivates by its wealth of practical details: resistant against sparks, equipped with a metal swarf collector, suction hoses made of steel and a cassette filter, it optimally conforms to the requirements of industrial operations.

Technical data

	GI 75	GI 75 2H	GI 150	GI 150 2H
Power	4,000 W	2,600–3,100 W	4,000 W	2,600–3,100 W
Speed	3,000 rpm	1,500/3,000 rpm	1,500 rpm	1,500/3,000 rpm
Belt size	75 × 2,000 mm	75 × 2,000 mm	150 × 2,000 mm	150 × 2,000 mm
Weight	65 kg	65 kg	82 kg	82 kg
Part number	7 902 01	7 902 02	7 902 04	7 902 05
Contents include:	1 CEE plug, 16 A, 1 grinding belt 75 × 2,000 mm, grain 36 Z		1 CEE plug, 16 A, 1 grinding belt 150 × 2,000 mm, grain 40 Z	

	GIB	GIBE
Power	–	350 W
Weight	17 kg	55 kg
Part number	9 90 01 003 00 0	9 90 01 004 00 0
Contents include:	–	2 pcs. flexible hose, 4 pcs. clamping band

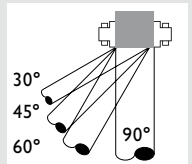
Pipe notching in series: Pipe notching module GIR

Fast and exact: the pipe notching module GIR is optimally tuned to industrial applications. The high abrasion performance guarantees economic operation – and with 150 mm belt width the GIR is also suited for workpieces with greater diameters.



GIR

- ▶ Precision notch grinding of pipes up to \varnothing 150 mm
- ▶ Vice with exchangeable stainless steel jaws and rapid clamping system
- ▶ Integrated depth stop for series production
- ▶ Setting angle adjustable without tools
- ▶ For angles of
 - 30° / max. \varnothing 30 mm
 - 45° / max. \varnothing 105 mm
 - 60° / max. \varnothing 130 mm
 - 90° / max. \varnothing 150 mm
- ▶ Contact rollers available for all common pipe diameters
- ▶ In combination with GI 150 2H: Low speed (1,500 rpm) optimal for processing stainless steel and for use with contact rollers $< \varnothing$ 35 mm
- ▶ Effective double extraction when using the GIBE machine base in connection with adaptor (part no. 6 99 02 182 00 0)



Technical data

GIR	
Diameter pipes	\varnothing 20 – 150 mm
Dimensions profiles / flat material max.	120 × 150 mm
Belt size	150 × 2,250 mm
Weight	109 kg
Part number	9 90 01 007 00 0
Included in delivery: 1 x contact roller for \varnothing 42.4 mm; 1 grinding belt 150 x 2,250, grain 36 Z	

Basic belt grinder



GI 150 7 902 04
GI 150 2H 7 902 05



Machine base



GIB 9 90 01 003 00 0
GIBE 9 90 01 004 00 0



Pipe notching module



GIR 9 90 01 007 00 0



Pipe notching machine



GI 150 2H + GIBE + GIR



1. Robust and powerful

Its robust construction had been developed especially for use in industrial environments; continuous use is no problem for the GIR module. Just as the processing on thick-walled materials or solids: The great power output of the motors ensure economical grinding of pipes.



2. Especially comfortable

A special feature is the heavy-duty vice. Its rapid clamping system makes it possible to exchange the workpiece quickly and rationally. Contact corrosion on stainless steel workpieces is prevented by the supplied stainless steel clamping jaws. For effective suction the adaptor (part no. 6 99 02 182 00 0) is necessary.



3. Quite flexible

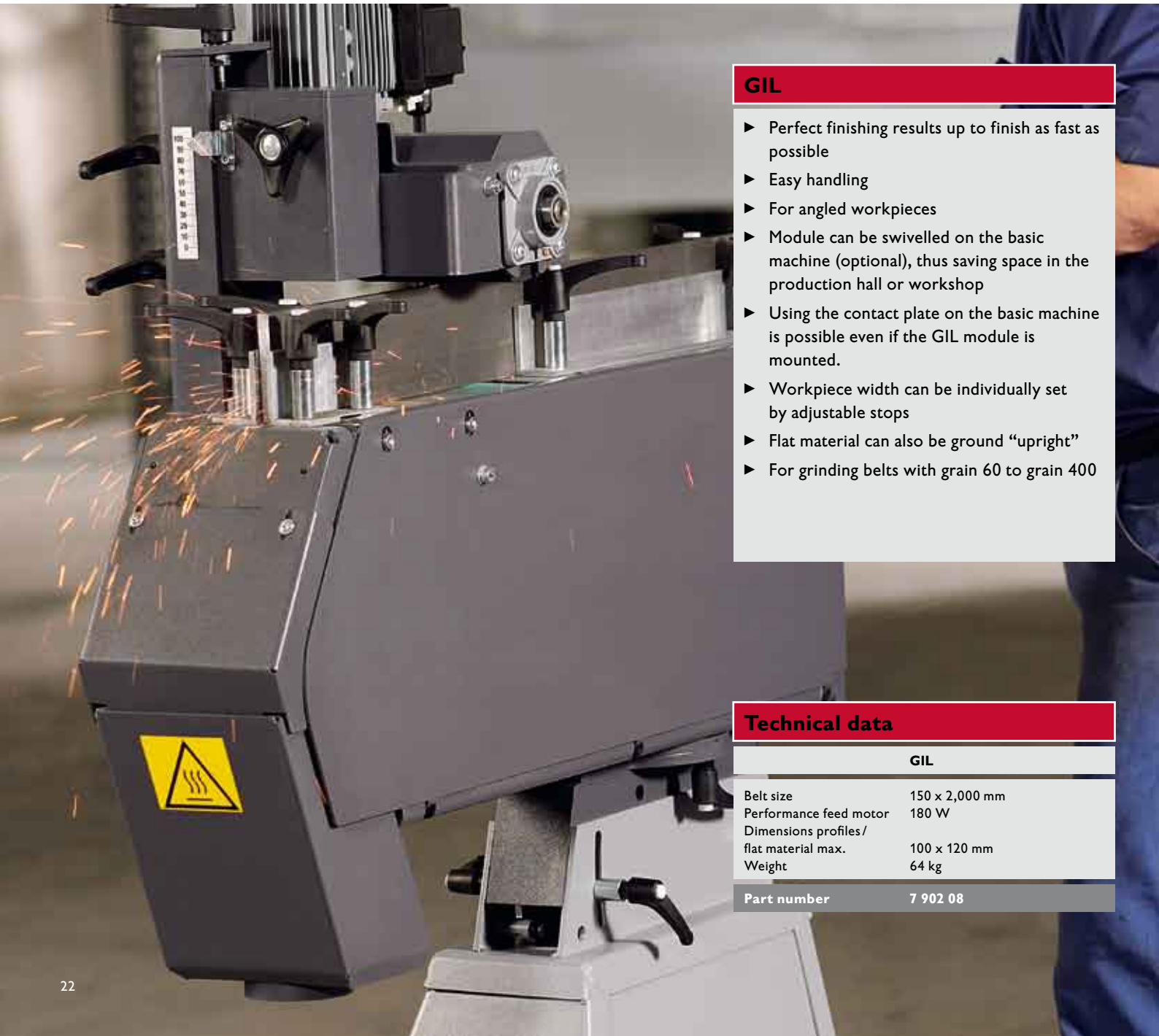
So that everything really fits during mitre grinding, GRIT has developed a special mitre grinding plate. Its simple attachment while retaining the belt length makes it unique in the market. The mitre grinding plate, for which patent has been applied for, is available as an option for the GIR module.

Maximum pipe diameter:

- ▶ 0° – Ø 110 mm
- ▶ 30° – Ø 80 mm
- ▶ 45° – Ø 60 mm

Surface grinding completely automatic: Surface grinding module GIL

Essential for machine and hand rail construction as well as for welding construction: The GIL module for longitudinal grinding is the only one on the market that features an automatic feed. GIL provides perfect surfaces quickly and economically and is suited for all metals, even stainless steel processing.



GIL

- ▶ Perfect finishing results up to finish as fast as possible
- ▶ Easy handling
- ▶ For angled workpieces
- ▶ Module can be swivelled on the basic machine (optional), thus saving space in the production hall or workshop
- ▶ Using the contact plate on the basic machine is possible even if the GIL module is mounted.
- ▶ Workpiece width can be individually set by adjustable stops
- ▶ Flat material can also be ground “upright”
- ▶ For grinding belts with grain 60 to grain 400

Technical data

GIL	
Belt size	150 x 2,000 mm
Performance feed motor	180 W
Dimensions profiles/ flat material max.	100 x 120 mm
Weight	64 kg

Part number 7 902 08

Basic belt grinder



GI 150 7 902 04
GI 150 2H 7 902 05



Machine base



GIB 9 90 01 003 00 0
GIBE 9 90 01 004 00 0



Module



GIL 7 902 08



Longitudinal grinder



1. Surface grinding made easy

Even the longitudinal grinding of square and flat materials or profiles is made incredibly easy with the unique surface grinding module GIL – just as the conversion from belt to surface grinder. The belt dimensions of the basic machine remain unchanged thereby. Patent has been applied for this GRIT solution.



2. Perfect surfaces

All metals – from steel and non-ferrous metals up to stainless steel – can be perfectly machined, without making compromises on the surface quality. Even the strict requirements of stainless steel processing up to final finishing are fulfilled by the GIL module with ease.

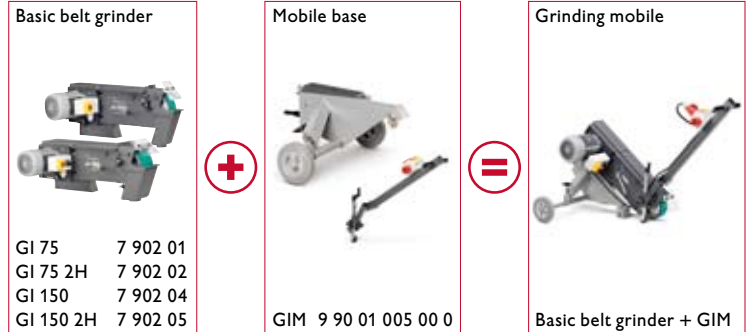


3. Great performance, little space

Smart solution: Thanks to the GIT swivel joint (optionally available, part no. 6 99 02 176 00 0) and the modular machine concept you can make optimal use of the GIL module even in confined spaces, because the work area can be quite easily be adapted to the surroundings. The infinitely variable swivel range is 0° – 90°.

Makes belt grinding mobile: GIM carriage

The GIM grinding module is always employed when the work-piece cannot be transported without a major effort. The belt grinder then turns into a mobile grinding unit – and can then be put to work on site, for example in ship construction. Weld seams on the floor can be polished in passing – without fatigue; without bending over and with a great deal of time saved compared to alternative methods.



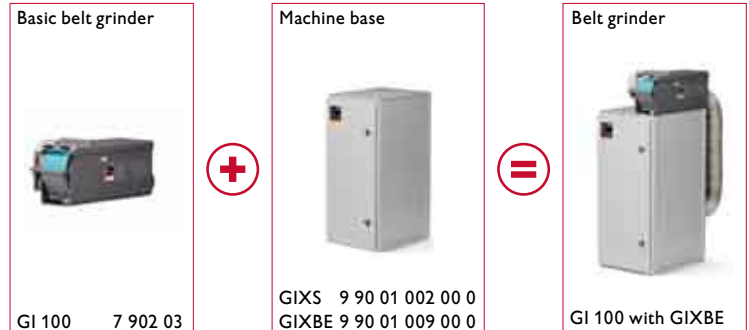
- GIM**
- ▶ Highly effective grinding / polishing of weld seams on the floor
 - ▶ Subsequent grinding of steel casting moulds for prefab concrete
 - ▶ Comfortable work handling, fatigue-free without bending over
 - ▶ Easy handling
 - ▶ Minimum wall clearance
 - ▶ Towing bar position can be adjusted infinitely variable
 - ▶ Adjustable depth stop

Technical data

GIM	
Belt size	75 / 150 x 2,000
Weight	35 kg
Part number	9 90 01 005 000 (3~, 400 V – 50 Hz / 440 V – 60 Hz)
	9 90 01 006 000 (3~, 230 V – 50 / 60 Hz)

Professional belt grinder in small format: Belt grinder GI 100

Maximum performance in smallest format: The Belt grinder GI 100 is the universal machine for abrasive grinding, deburring of small parts and for continuous surface grinding in series production. Its small size makes this robust and compact belt grinder the perfect alternative in confined spaces.



GI 100

- ▶ Universally applicable belt grinder with excellent performance values
- ▶ Optimal use in machining of small parts
- ▶ As a table machine or on optionally available machine base with or without integrated suction (see page 30)
- ▶ Patented belt-tensioning system by gas spring
- ▶ Outstandingly suited also for mobile employment in workshop or assembly vehicles
- ▶ Also available as a variant with single-phase AC current 230 V/50 Hz
- ▶ Detailed information on the GRIT machine bases can be found on page 13

Technical data	
GI 100	
Power	1,500 W
Speed	3,000 /min
Circumferential speeds	30 m/sec.
Belt size	100 × 1,000 mm
Weight	28 kg
Part number	7 902 03
Included in delivery: 1 Grinding belt 100 × 1,000 mm, grain 60 Z	

The specialist for belt grinding: Belt grinder GIS 75

The ideal solution for all those who are looking exclusively for a belt grinder: GIS 75. The robust construction of the powerful motor, the simple operation and the first-class work quality are the characteristics of the extremely compact GIS 75 belt grinder. Omitting the extension possibilities by module makes its purchase especially economic as well.



GIS 75

- ▶ High-performance belt grinder, complete with sturdy machine base
- ▶ Constant speed at high grinding performance thanks to powerful, robust 4 kW motor
- ▶ Ease of operation: low vibrations, easily adjustable work height
- ▶ Patented belt-tensioning system
- ▶ Great work safety: CE-conform, stop, grinding gap, and eye protection can be adjusted individually
- ▶ Swarf collector

Technical data

GIS 75	
Power	4,000 W
Speed	3,000/min
Belt size	75 × 2,000 mm
Weight	74 kg
Part number	7 902 09 50
Included in delivery: 1 CEE plug, 16 A; 1 grinding belt 75 × 2,000 mm, grain 36 Z	





Belt grinder



GIS 75

7 902 09 50



1. Maximum performance on smallest area:

The compact construction makes sure that the GIS 75 operates in as little space as possible. The conscious omitting of extension possibilities ensures an extremely simple handling and a very good price-performance ratio. This industrial belt grinder is immediately ready for professional non-stop operation.

2. Performance compactly bundled

The GRIT GIS 75 draws its high and continuous performance from its 4 kW strong motor. In combination with the robust construction it is the optimal belt grinder for all professional standard tasks. The easy operation additionally ensures a very high operational reliability.

Shiny results all around: Centreless grinding centre GICS

Exactly the right machine for outer cylindrical grinding of pipes and round materials in series: Centreless grinding centre GICS. From rough grinding to finish – the process speed of the GICS is impressive, just as the work quality. Even stainless steel receives the perfect final finish.



GICS

- ▶ High performance cylindrical grinder for pipes and round material made of steel, stainless steel, cast and non-ferrous metals, from \varnothing 10 – 160 mm
- ▶ High work speed and abrasion performance
- ▶ 2 speeds: Low speed (1,500/min) optimal for processing stainless steel
- ▶ Wet grinding for perfect surface quality up to the finish
- ▶ Robust construction of modest size
- ▶ Simple and effective belt adjuster and patented belt-tensioning system by gas spring
- ▶ Integrated guide rail exchange system by turret head
- ▶ Infinitely variable adjustable feed speed
- ▶ Prism guide for long workpieces available as accessory
- ▶ Expandable by linking two GICS grinding centres

Technical data

GICS	
Power max.	3,100 W
Speed	1,500/3,000/min
Circumferential speed	30 m/sec
Belt size	75 x 3,000 mm
Weight	200 kg
Part number	7 902 06

Included in delivery: 1 CEE plug (16 A), 1 guide rail brass, 1 guide rail nylon, 1 guide roll rubberized, 1l cooling lubricant emulsion, 1 grinding belt 75 x 3,000 mm, grain 220 A



1. High-performance grinding in series

Even pipes with greater diameters and other round materials can be ground rationally and with brief processing times using the GICS grinding centre. An integrated cooling lubrication and the infinitely variable feed speed are the best prerequisites for processing suiting the material up to the perfect surface, even for such demanding material such as stainless steel.



2. Perfectly equipped down to the minute detail

The GICS centreless grinding centre has standard equipment for everything that is necessary for easy and convenient operation. Resolutely designed for use in series production, the GICS has been robustly constructed and features superior machine reliability. The matching grinding belts for all materials and requirements are of course also available from GRIT.



3. With room for extensions

Longer workpiece can also be processed by the GICS without a problem – by an optimal linear guide combined with extension fittings with prism guide. This guarantees the precise alignment in horizontal and vertical direction. A special highlight: two consecutive work steps can be processed in one pass by the GICS – you just need to combine two GICSs sequentially in line.

Deburring under industrial conditions: Deburring machine GIE

Workpieces made of steel, non-ferrous metals and stainless steel can be quickly and effectively deburred by the deburring machine GIE. The robust construction and the powerful drive make this machine ideal for industrial applications. As a table-top device or with the optional base, it can adapt itself even to confined conditions.



GIE

- ▶ For efficient deburring and polishing of workpieces made of steel, stainless steel, cast or non-ferrous metals
- ▶ For use with steel and stainless steel wire brushes as well as conventional polishing tools
- ▶ Optimal speed adjustment by 2 speeds
- ▶ Various wire thicknesses also for especially thick- and thin-walled workpieces and in stainless steel versions available
- ▶ Suitable as a table machine or on optionally available machine bases with (GIXBE) and without suction (GIXS), see page 13

Technical data

GIE	
Power	1,500 W
Speed	1,500/3,000/min
Tool Ø max.	250 mm
Tool width	2 x 60 mm
Weight	34 kg
Part number	7 902 07

Quality down to the finest detail: Original GRIT machine accessories

There is one thing that all of our machine accessories have in common: They are perfectly tuned – to our machines as well as to your requirements of daily work. Backed by the know-how of 25 years of belt grinding engineering, the GRIT machine accessories are not only convincing because of their special quality, but also due to a significant improvement of their efficiency.



Accessories GI 75/GI 75 2H

Graphite coating

As a gliding base for plane grinding, 80 × 430 mm, pack of 5

Part number 3 90 00 000 00 1

Contact wheel

Ø 200 × 75 mm, grade 80 shore (extra hard)

Part number 3 90 00 000 00 5

Drive disc

with polyurethane coating for long service life, Ø 200 × 75 mm

Part number 3 90 00 000 00 6



Eye protection

Acrylic screen for protection against sparks, pack of 3

Part number 3 90 00 000 19 0

Accessories GI 150/GI 150 2H

Graphite coating

As a gliding base for plane grinding, 155 × 430 mm, pack of 3

Part number 3 90 00 000 05 6

Contact wheel

Ø 200 × 150 mm, grade 80 shore (extra hard)

Part number 3 90 00 000 18 8

Drive disc

with polyurethane coating for long service life, Ø 200 × 150 mm

Part number 3 90 00 001 08 9

Accessories GI 150/GI 150 2H



Eye protection

Acrylic screen for protection against sparks, pack of 3

Part number 3 90 00 000 18 4

Accessories GIR



Contact rollers

Long service life, low resistance because of high-quality ball bearings, easily replaceable

Diameter	Part number
Ø 20.0	6 99 02 101 00 0
Ø 22.0	6 99 02 102 00 0
Ø 25.0	6 99 02 103 00 0
Ø 25.4	6 99 02 104 00 0
Ø 26.9	6 99 02 105 00 0
Ø 28.0	6 99 02 106 00 0
Ø 30.0	6 99 02 107 00 0
Ø 32.0	6 99 02 108 00 0
Ø 33.7	6 99 02 109 00 0
Ø 35.0	6 99 02 110 00 0
Ø 38.0	6 99 02 111 00 0
Ø 38.1	6 99 02 112 00 0
Ø 38.3	6 99 02 113 00 0
Ø 40.0	6 99 02 114 00 0
Ø 42.4	6 99 02 115 00 0
Ø 44.5	6 99 02 116 00 0
Ø 48.3	6 99 02 117 00 0
Ø 50.0	6 99 02 118 00 0
Ø 50.8	6 99 02 119 00 0
Ø 60.0	6 99 02 120 00 0
Ø 60.3	6 99 02 121 00 0
Ø 63.5	6 99 02 122 00 0
Ø 69.0	6 99 02 123 00 0
Ø 76.1	6 99 02 124 00 0

Accessories GIL

Swivel joint

For adjusting the work area for confined spaces, infinitely variable swivel area up to 90°

Part number 6 99 02 176 00 0

Diameter	Part number
Ø 76.2	6 99 02 125 00 0
Ø 84.0	6 99 02 126 00 0
Ø 88.9	6 99 02 127 00 0
Ø 101.6	6 99 02 128 00 0
Ø 104.0	6 99 02 129 00 0
Ø 108.0	6 99 02 130 00 0
Ø 114.3	6 99 02 131 00 0
Ø 133.0	6 99 02 132 00 0
Ø 139.7	6 99 02 133 00 0
Ø 168.3	6 99 02 134 00 0
Ø 193.7	6 99 02 135 00 0

Mitre grinding plate

For precision mitre grinding, simple assembly. Max. pipe Ø: 0° – Ø 110 mm, 30° – Ø 80 mm, 45° – Ø 60 mm

Part number 6 99 02 175 00 0



Eye protection

Acrylic screen for protection against sparks, pack of 3

Part number 3 90 00 000 18 4



Adaptor

For optimal extraction for connection to the GIBE machine base with double extraction

Part number 6 99 02 182 00 0

Accessories GIE

Steel brush

Ø 250 mm × 60 mm, with very high wire strength for especially efficient use, mounting hole, Ø 51 mm.

0.2 mm wire gauge for thin walled pipes and profiles. 0.35 mm wire gauge for universal employment. 0.5 mm wire strength for thick walled pipes and profiles and high deburring effectivity.

Steel model:

Wire gauge mm	Part number
0.20	6 99 02 006 00 0
0.35	6 99 02 007 00 0
0.50	6 99 02 008 00 0

Stainless steel model:

Wire gauge mm	Part number
0.20	6 99 02 009 00 0
0.35	6 99 02 010 00 0

Eye protection

Acrylic screen for protection against sparks, pack of 3

Part number 3 90 00 000 00 4

Accessories GIBE / GIXBE

Cassette filter

Fits GIBE

Part number 3 90 00 000 97 6

Cassette filter

Fits GIXBE

Part number 3 90 00 001 00 5

Accessories GICS

Prism guide GICW

Metal guide for supporting the feed of long pipes, sized Ø 10 – 160 mm

Part number 6 99 02 179 00 0

Linear guide

Device for exact alignment of the prism guides in horizontal and vertical direction, for direct mounting on the left and right of the GICS, 2-pack

Part number 6 99 02 178 00 0

With machine base, for floor mounting, pack of one

Part number 6 99 02 185 00 0

Extension fitting

to connect 2 prism guides

Part number 6 99 02 180 00 0

Suppressor

For improving the concentricity at light material unevenness, for pipe Ø of 10 – 160 mm

Part number 6 99 02 177 00 0

Guide rail, brass

For dry grinding and course material surfaces

Part number 3 90 00 000 49 6

Guide rail, nylon

For high surface quality

Part number 3 90 00 000 49 7

Accessories GICS

Cooling lubricant emulsion

Concentrated, 10 l, mix ratio 1:30, makes 300 l ready coolant

Part number 6 99 02 100 00 0

Further accessories

Flexible hose

For swarf removal, Ø 90 mm, 1 m long, steel, high heat resistance

Part number 3 90 00 000 00 2

Clamping band

For fastening the flexible hose

Part number 3 90 00 000 00 3

Swarf bag

For collecting swarf, quick and easy attachment

Part number 6 99 02 005 00 0

Dust collector

Collecting container for swarf, plastic, ca. 400 × 300 × 285 mm, can also be used as a water container for catching sparks, capacity about 20 l

Part number 3 90 00 000 48 5

With metal lid for hose connection

Part number 6 99 02 000 00 0



GRIT – Belt grinding for professional users in engineering trades and industry

Your retailer

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