

 **BEVEL**

presents

GRINDER FOR BACK GAUGING

POWERFUL

PORTABLE

VERSATILE

GREDGER



AVAILABLE IN 2 CONFIGURATIONS

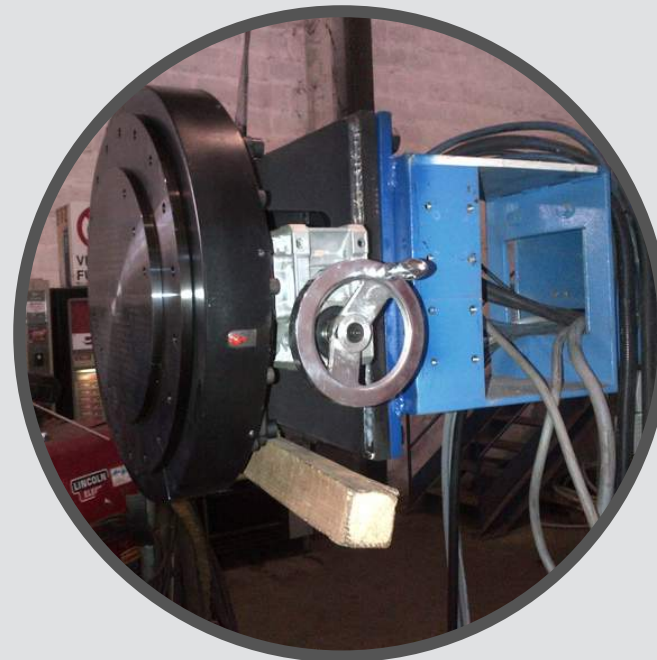
1

On trolley
with wheels



2

With 5th wheel flange for
installation on the
manipulator for gauging
longitudinal seams



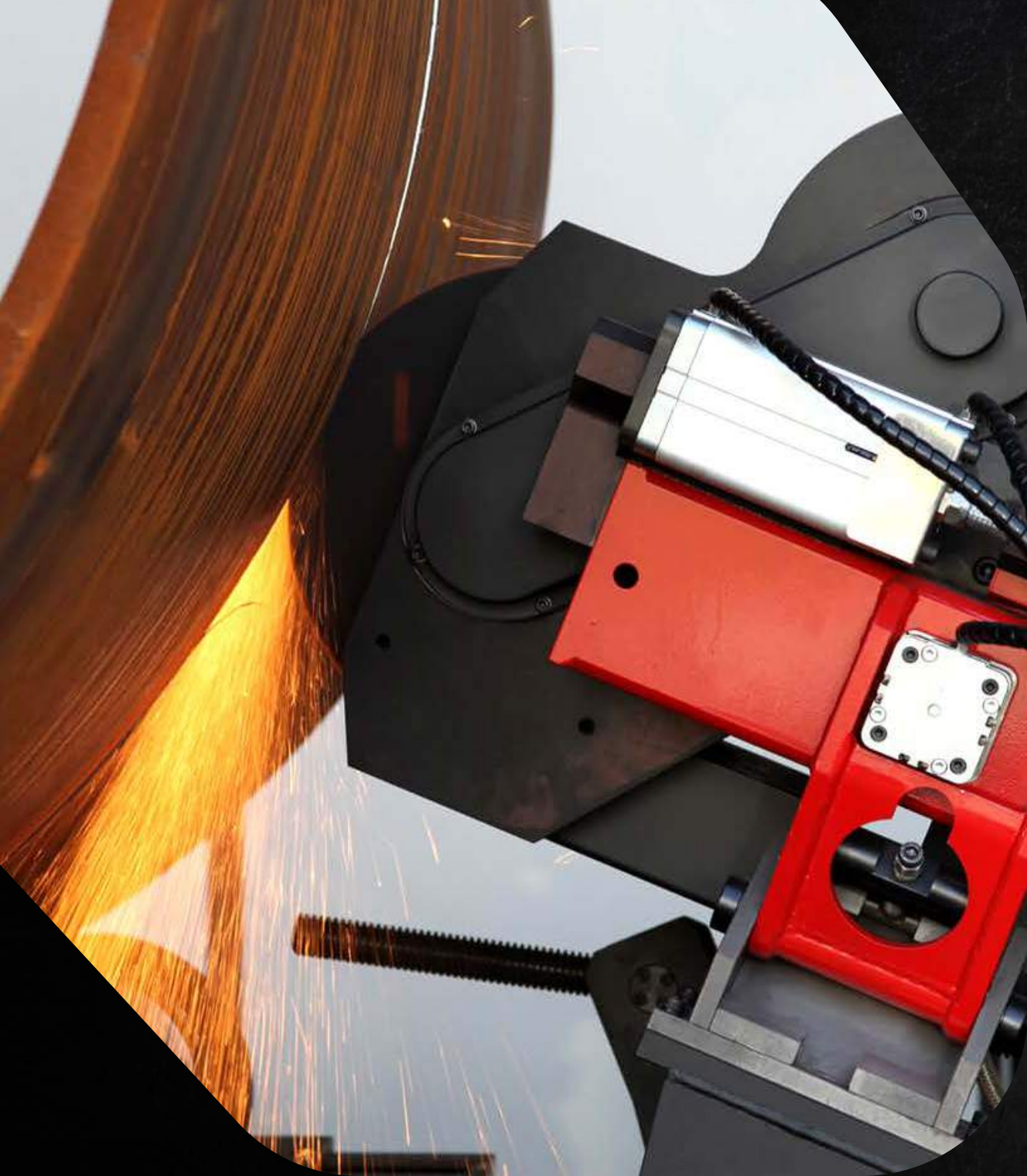
GREDGER

grinder for back gauging

PORTABILITY

Easy positioning wherever
you need it





GREDGER

grinder for back gauging



IMPROVE YOUR BACK GAUGING PROCESS

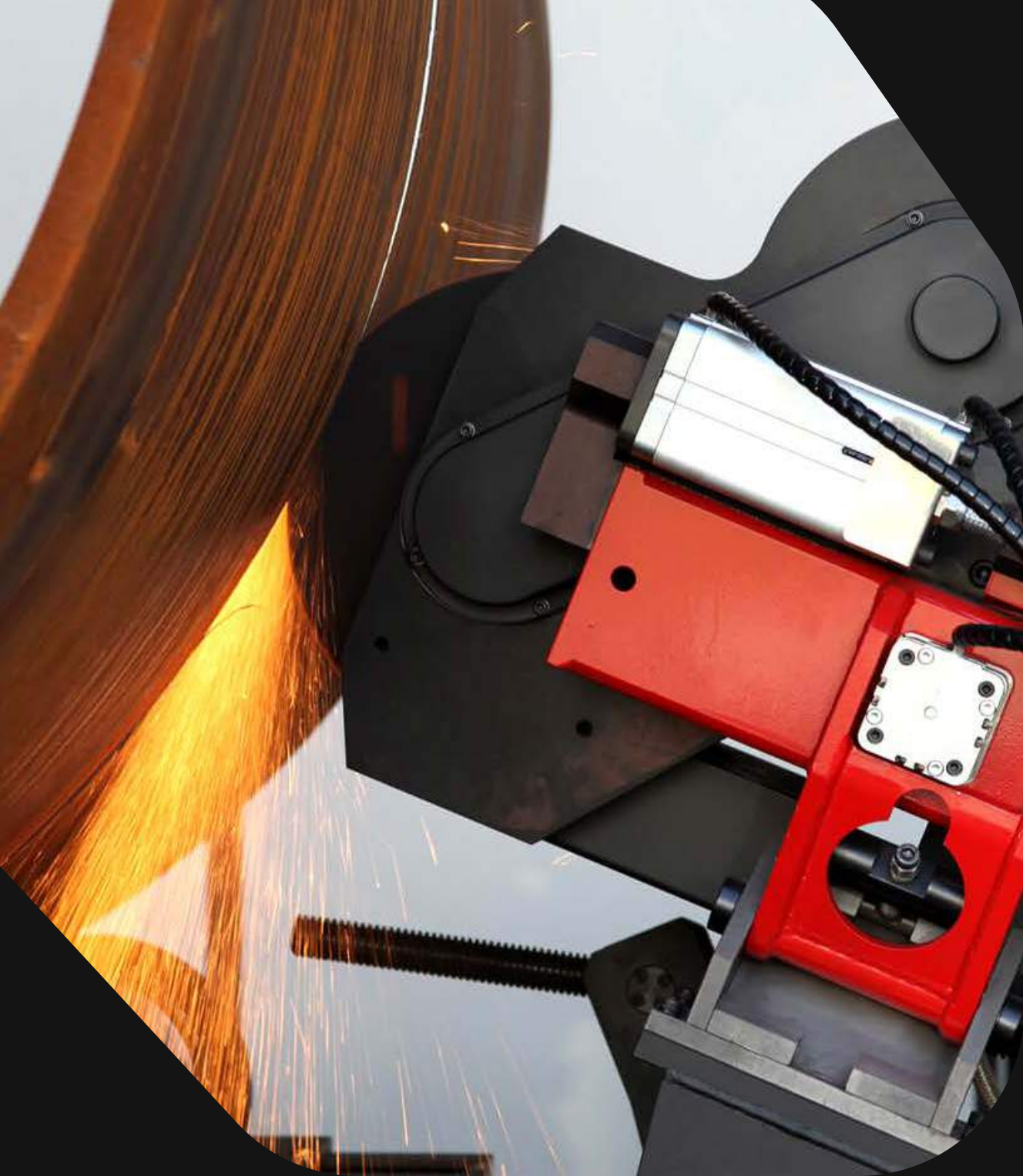
- multiple back gauging options

OUTSIDE | INSIDE | LONGITUDINAL

- PRECISE
- HEALTHIER than air arc gauging
- NO HEAT AFFECTED ZONE

 **BEVEL**

INTELLIGENT
FLOATING
SYSTEM  



GREDGER

grinder for back gauging

MAIN FUNCTIONS

- back gauging - welding root removal
- welding seam excess thickness removal
- welding area preparation by grinding
- polishing of vessels by grinding belt unit
- material: all kinds of steel



GREDGER

grinder for back gauging

TECHNICAL FEATURES

- Min. groove width **11 mm**
- Max. groove width up to **38 mm**
- Max. penetration depth **120 mm**
- Groove always has U-shape
- Material removal rate
1 to 2 mm per revolution

120 mm

EXAMPLE

4500 MM DIAMETER
MILD STEEL
PENETRATION 8 MM
EXECUTION TIME 55 MINUTES

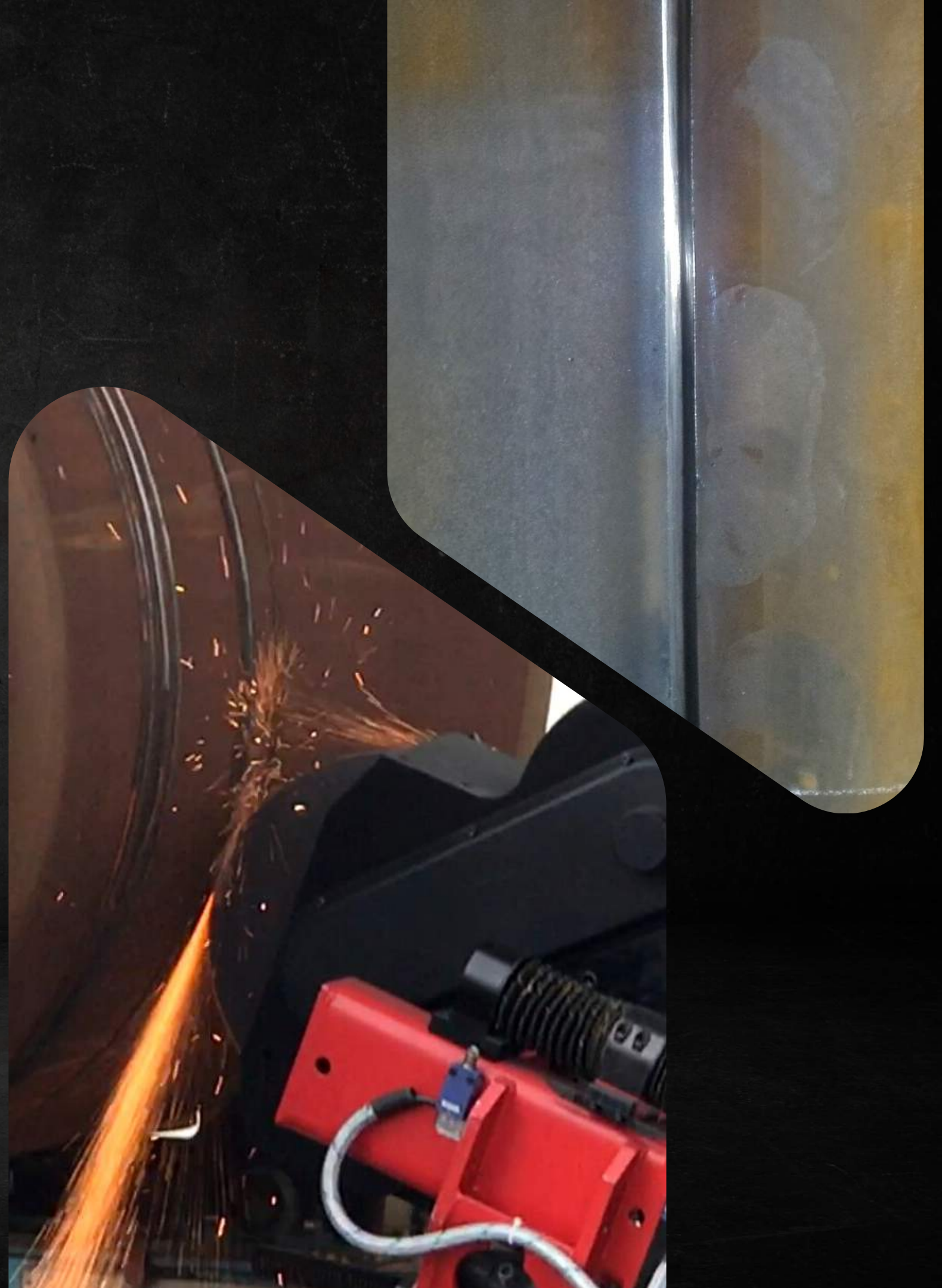


TIME SAVING
LABOUR SAVING
EFFORTLESS



GROOVE WIDTH

- Groove width range: 11 to 38 mm depending on disc thickness
- Available disc thickness
8 | 10 | 12 | 14 | 16 mm
- Grinding unit can be tilted to adjust groove width

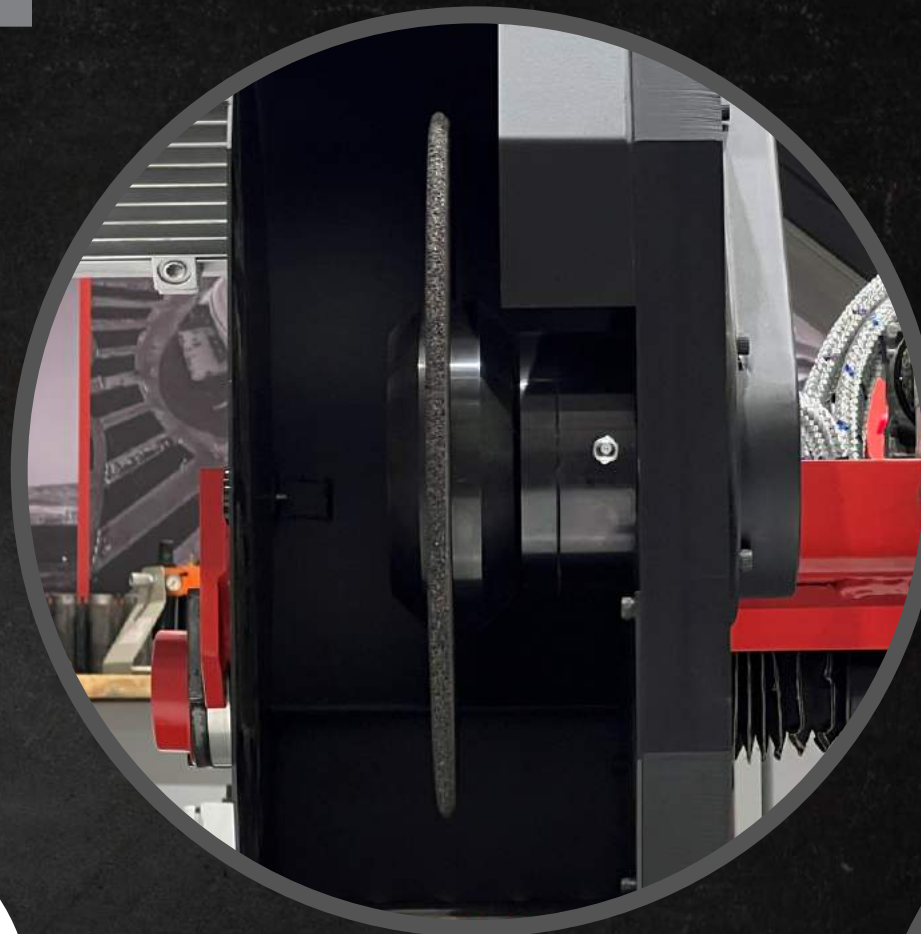


EXAMPLE

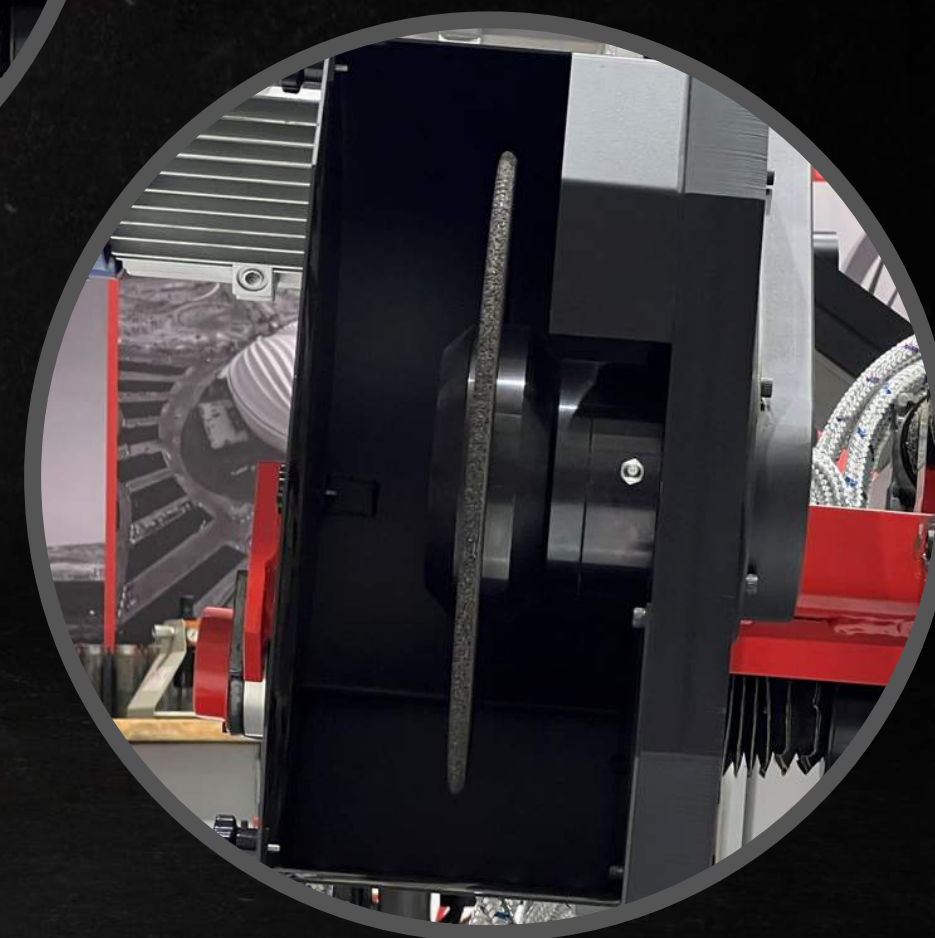
8mm disc,

TILTING THE GRINDING UNIT

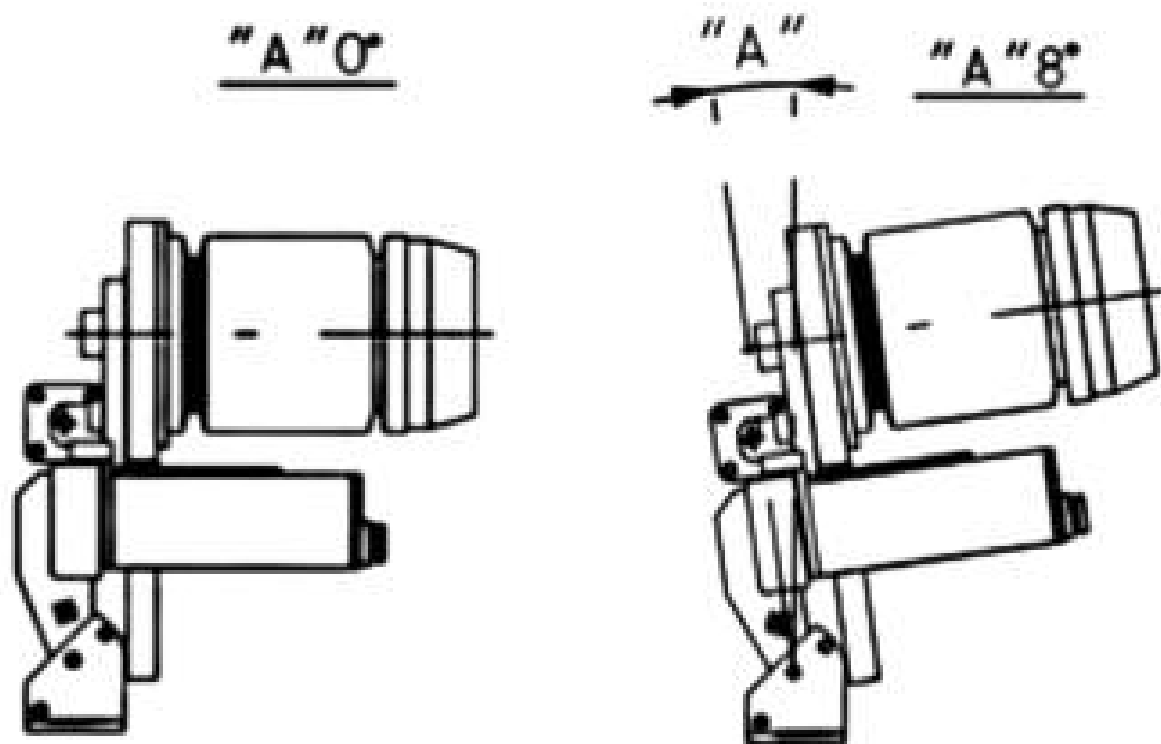
11 to 13 mm groove width.



0° tilt



5° tilt





PRECISE GROOVE EXECUTION

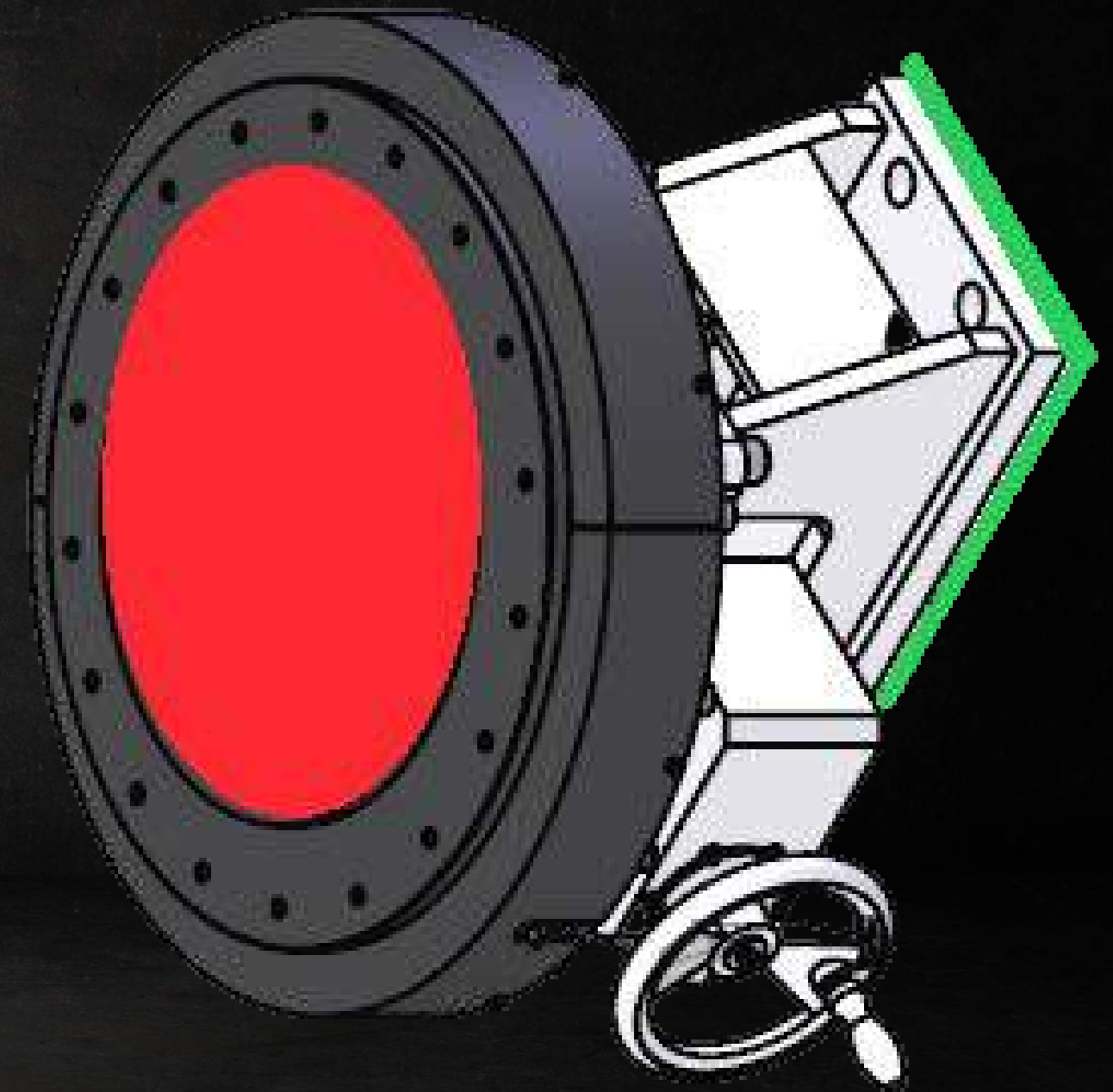
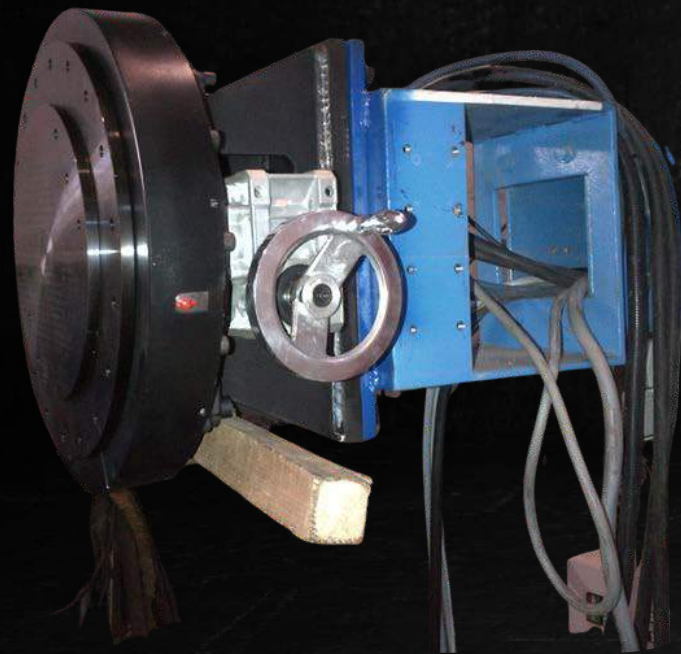
- **UNIQUE INTELLIGENT FLOATING SYSTEM**
enabling uniform penetration depth -> correct groove size with ovality compensation
- **LEFT-RIGHT FLOATING** -> correct groove position and tracking the welding seam

INTELLIGENT
FLOATING
SYSTEM



BACK GAUGING WITH MANIPULATOR

- Fully customisable
- **RED** - GREDGER grinding unit
- **GREEN** - adapts to specific manipulator



GREDGER

grinder for back gauging



INSIDE BACKGAUGING

Minimum diameter **1200 mm**

LONGITUDINAL BACKGAUGING

Any length depending on
manipulator type



GRINDING BELT UNIT

for POLISHING OUTER SHELL SURFACE
and shaving of the weld excess



TECHNICAL DATA

Power supply tension	(V)	400
Main Motor Power	(kW)	9
Push/Horizontal motor power	(kW)	0.37
Total Power	(kW)	10
Head horizontal stroke	(mm)	160
Total Power	(kW)	10
Head push/horizontal stroke	(mm)	140/160
Grinding disc speed	(rpm)	3200
Grinding disc maximum diameter	(mm)	410
Grinding disc peripheral speed	(m/s)	65
Gouging depth	(mm)	0-120
Gouging Force	(N)	150
Rotation speed of the positioners min/max	(mm/min)	500-2000
Grinding disc productivity	(Kg/min)	0.080
Weight of the head	Kg	180
Weight of the head + trolley (complete unit)	kg	500


GREDGER

grinder for back gauging

BENEFITS

- Vessel ovality compensation through the **INTELLIGENT FLOATING SYSTEM** => Automatic adjustment of penetration => same depth of gauge all around the vessel
- Left / Right shifting system => uniform groove, always following the welding seam
- No heat affected zones
- Only one operator

INTELLIGENT
FLOATING
SYSTEM

A diagram illustrating the 'INTELLIGENT FLOATING SYSTEM'. It features a green vertical double-headed arrow on the right side and a red horizontal double-headed arrow below the word 'SYSTEM', indicating the system's ability to adjust in both vertical and horizontal directions.

BENEFITS

- No health risks
- Can be equipped with a grinding belt unit for weld polishing
- Fifth wheel to fit on manipulator
- Portability
- Fast return on investment

RETURN
ON
INVESTMENT

