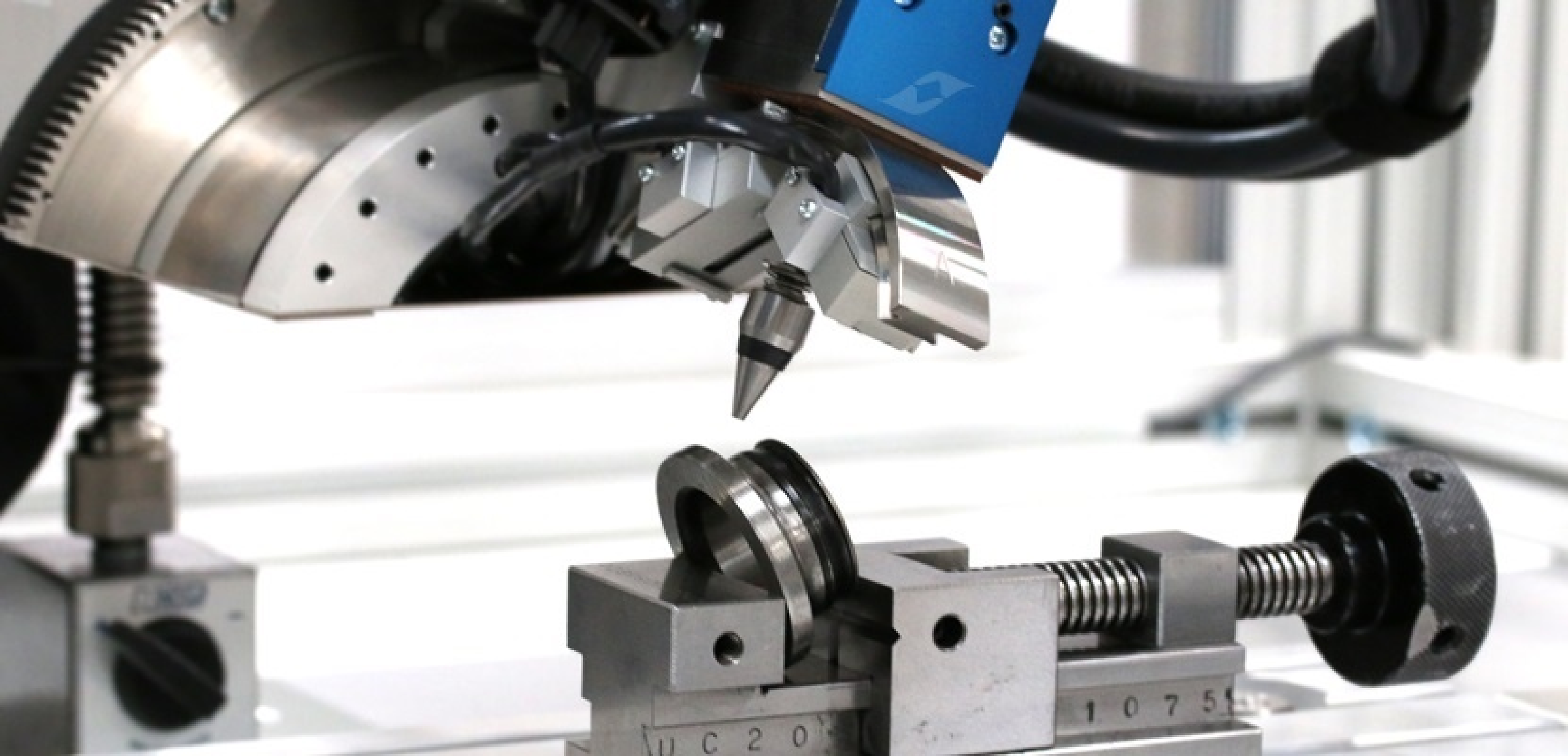


# Xstress G2

2019-11-07



*Measure for success*

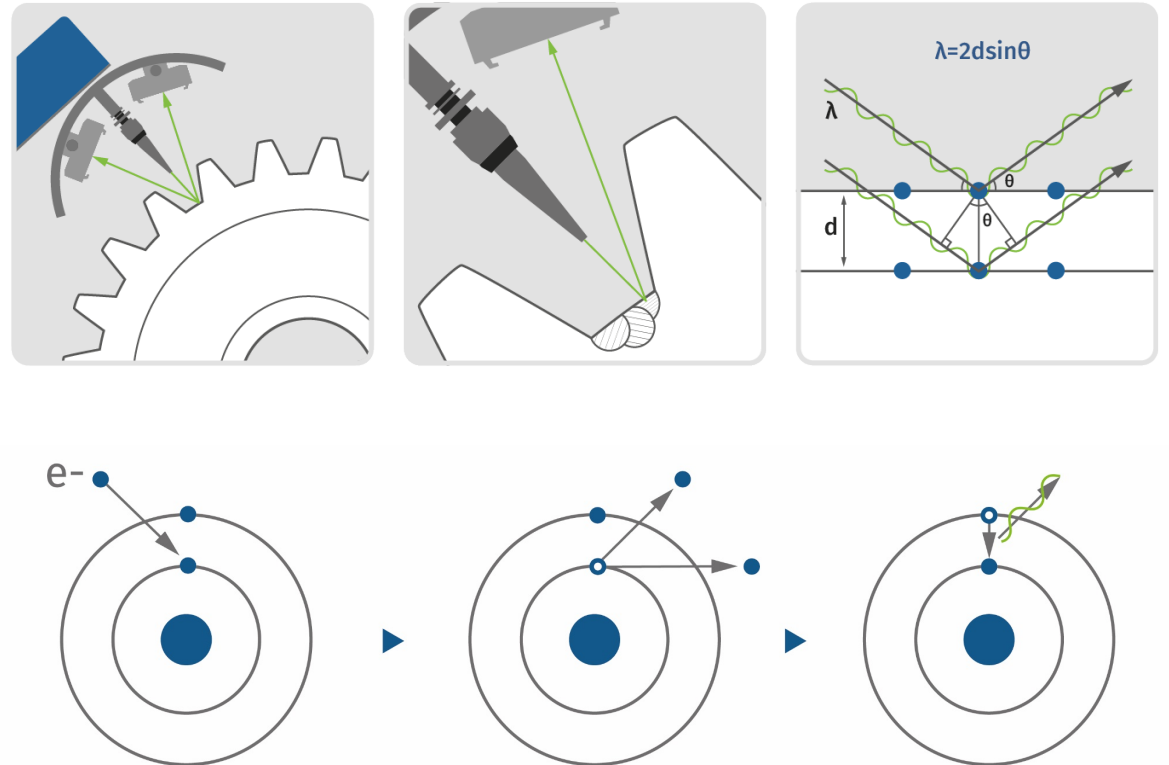


# Xstress G2

Manufacturing processes like **heat treatment, machining, welding, shot peening** and **grinding** generate residual stresses in manufactured components.

**X-ray diffraction** is a powerful method for measuring these stresses both in component surface and beneath the surface as a stress depth profile.

X-ray diffractometer **Xstress G2** represents advances in design and construction, which provide enhanced reliability and function in a truly portable residual stress and retained austenite analyzer.



# Xstress G2

- ✓ Non-destructive
- ✓ Suitable for laboratory, factory and field use
- ✓ Quick assembly, ready to use in 10 minutes
- ✓ Easy replacement of X-ray tube (Cr, Cu, Co, Fe, V, Ti, Mn) which enables measuring different materials
- ✓ Measurement distance 50 mm
- ✓ Two NMOS position sensitive detectors
- ✓ Instantly adjustable  $2\theta$ -angle
- ✓ XTronic software for running the measurement and calculating residual stresses and retained austenite content (optional)
- ✓  $d\text{-sin}^2\chi$  and  $\Omega$ -measurement modes as a standard



# Xstress G2

Standard system	Item 100041
Xstress G2 diffractometer	288600100F
X-ray tube Chromium (Cr)	288409020
Short collimators Ø 1-5 mm spot size	
✓ 1 mm	35006831640
✓ 2 mm	35006831641
✓ 3 mm	35006831642
✓ 4 mm	35006831643
✓ 5 mm	35006831644
G2 detector short	288500010
Detector arc 50 mm	35006831604C
Xstress main unit	288603000
Xstress alarm light	281000130

Software	Item
XTronic	100097

Cables	Item
Power cable	270110250
LAN Ethernet cable	270120070

G2 accessories	Item
Measuring accessories set	288490010
Tool set	288490005

Transport packages	Item
Xstress G2 package	290404250
Xstress main unit package	290404100

# Xstress G2

Standard system includes - Measuring accessories set

Powder sample (Fe-ferr, Fe-aust, Al)

Collimators  $\varnothing$  1-5 mm spot size

Spare fuses

Level

Spare bulb (shutter)

Spare bulb (alarm light)

Fluorescent screen



# Xstress G2

Standard system includes - Tool set

Hex key set (1.5-10 mm)

Torx key set (T6-T20)

Adjustable wrench 6"



# Xstress G2

## Options

Xstress accessories	Item
Safety enclosure	100069
Table for X-ray	100070
Safety wall	100161
Vertical column for table for X-ray	128500030
X-Y system: 200/300/400 mm stroke	100061/100062/100156
Floor stand (motorized)	100067, (100068)
X-ray elastic constant determination system, (HD 5 mm)	100059, (100137)
Retained austenite measurement package:	
✓ XTronic option	6010005302
✓ Retained austenite detector arc 50 mm	35006831699
✓ Vanadium filter short	288500050
Customized special collimators	contact sales

Xstress accessories (Depth profile)	Item
Electrolytic polisher Movipol 5	100092
Depth measuring stand, movable/ Depth measuring stand for table for X-ray	36907708050/ 36907555030B
Dial indicator: 12.5/25.0 mm	300130032/300201641
Release cable for dial indicator	300130033



# Xstress G2

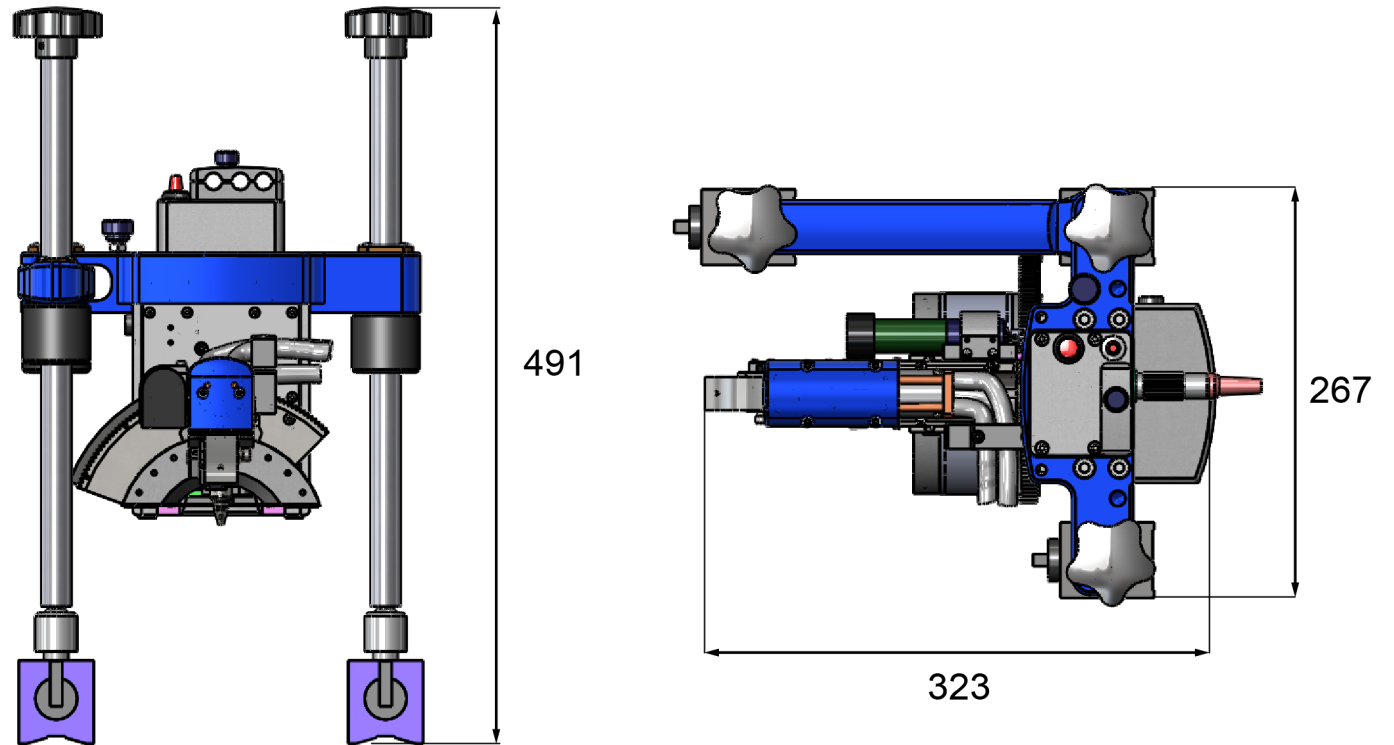
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## Options

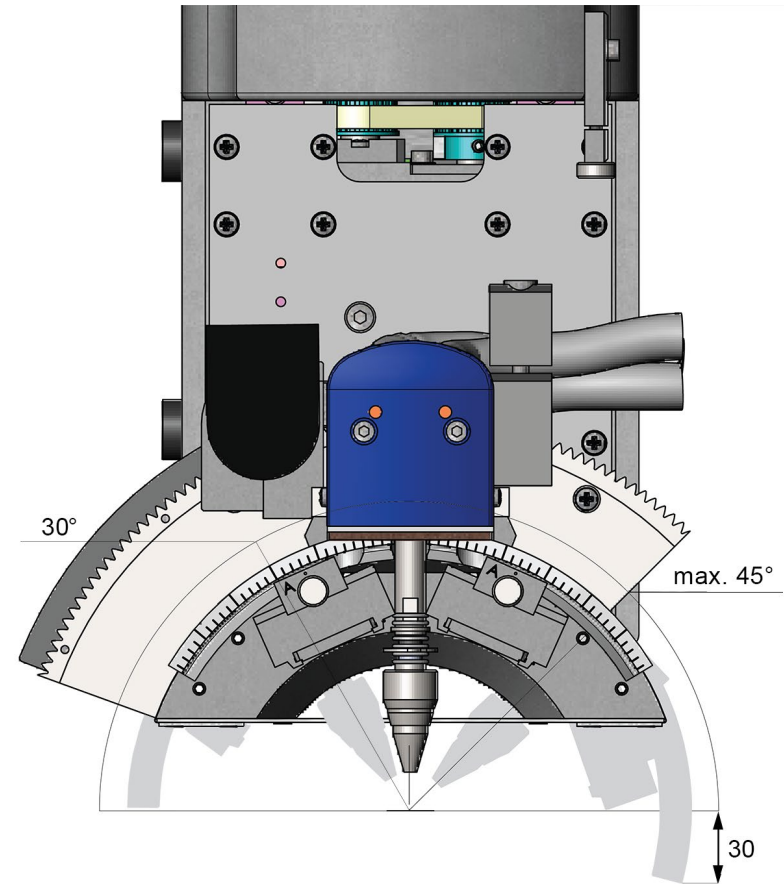
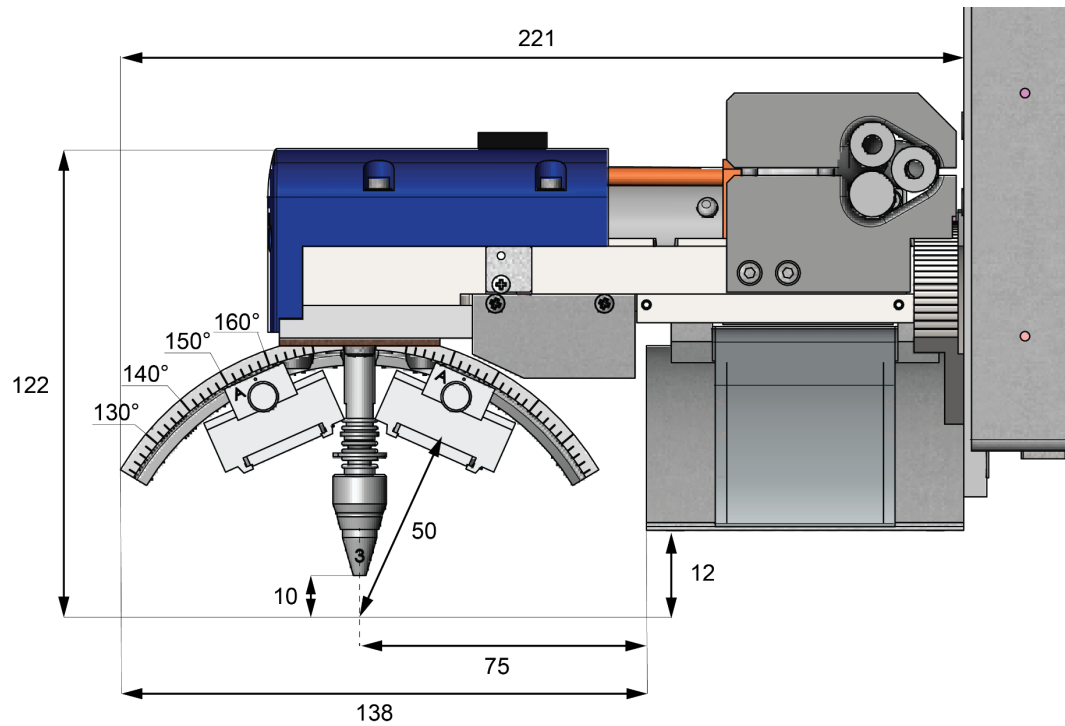
Xstress accessories (Tubes)	Item
Chromium (Cr)	288409020
Cobalt (Co)	288409080
Copper (Cu)	288409040
Iron (Fe)	288409090
Manganese (Mn)	288409060
Molybdenum (Mo)	288409100
Nickel (Ni)	288409110
Titanium (Ti)	288409070
Vanadium (V)	288409120

# Xstress G2

Dimensions		
Depth	323 mm	12.72 in
Width	267 mm	10.51 in
Height	491 mm	19.33 in
Weight	10 kg	22.1 lbs

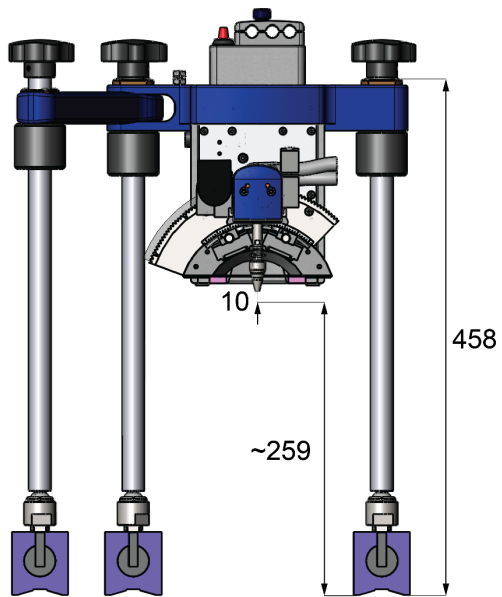


# Xstress G2

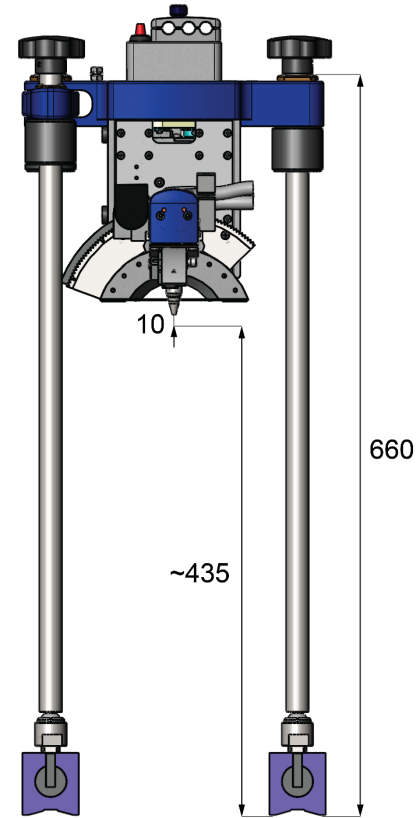


# Xstress G2

Technical specifications – diffractometer reach



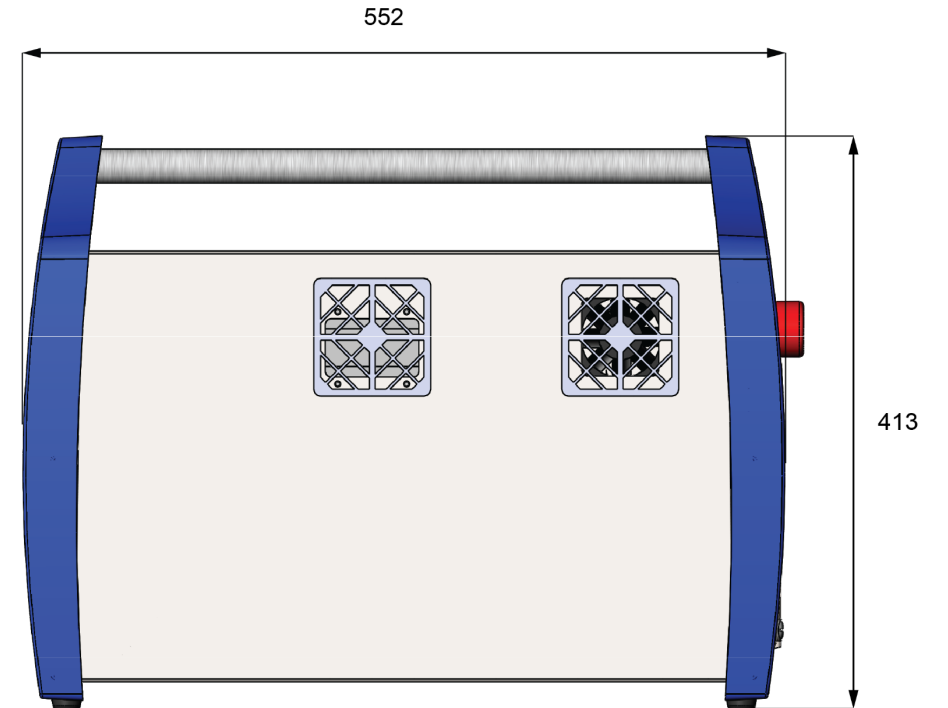
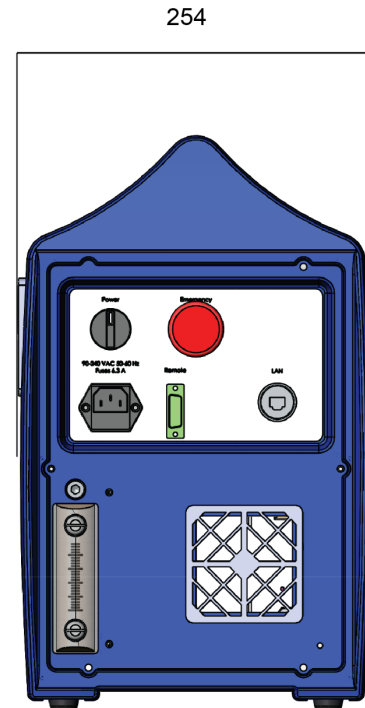
Standard legs



Extended legs 35006831198

# Xstress G2

Xstress main unit dimensions		
Depth	552 mm	21.73 in
Width	254 mm	10.00 in
Height	413 mm	16.26 in
Weight	26 kg	57.3 lbs

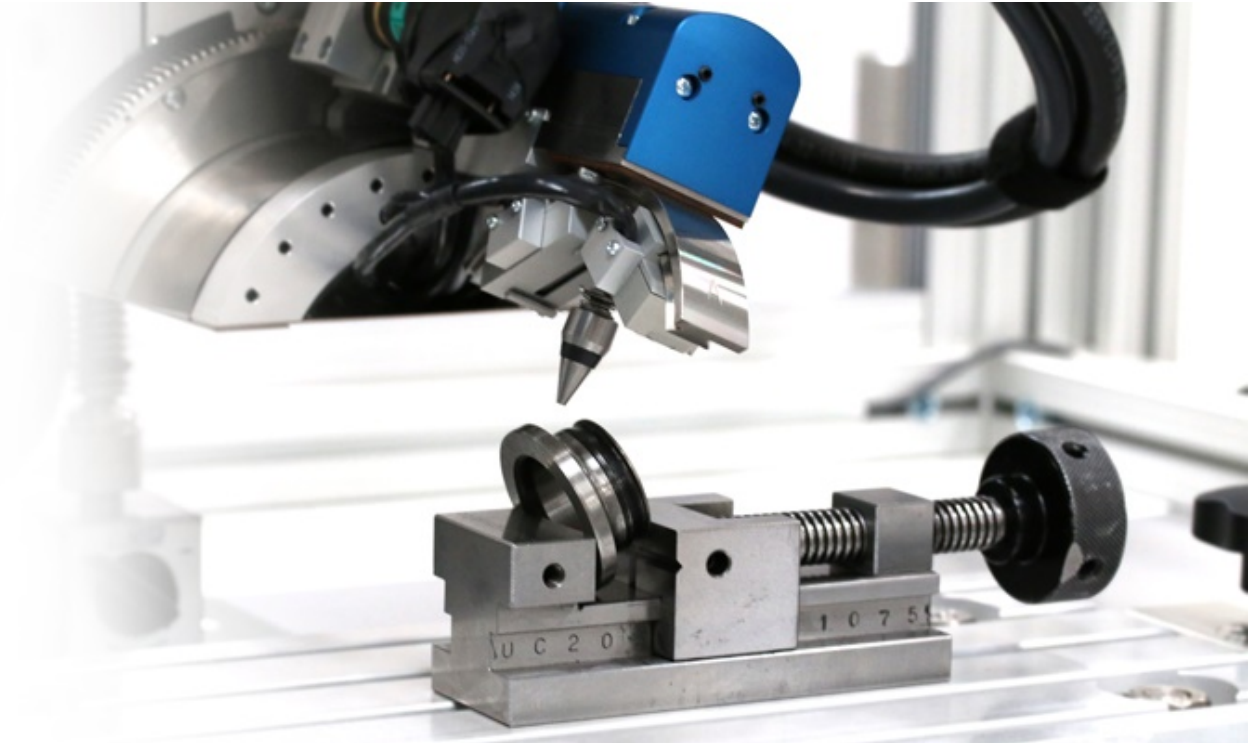


# Xstress G2

## Power demands

Voltage

100-240 V AC,  
50-60 Hz



# Xstress G2

## Xstress G2 package dimensions

Depth	500 mm	19.68 in
Width	350 mm	13.78 in
Height	490 mm	19.29 in
Weight	28 kg	61.7 lbs

## Xstress main unit package dimensions

Depth	640 mm	25.19 in
Width	360 mm	14.17 in
Height	520 mm	20.47 in
Weight	37 kg	81.6 lbs



# Xstress G2

**XTronic software** takes care of the measurements with Xstress systems from running the measurement to calculating the residual stress or retained austenite values. Whether it's a single measurement or mapping project, XTronic handles it.

