



# NTG

(R)-IBE 450



## Technical data:

Working range:	Ø450mm Ø18 inches
Thickness:	50mm (2 inches)
Weight:	max. 50kg (4.4 lb.)
Contact angle:	0-90°
Rotation speed:	0-10 rpm
Shape:	concave, convex, plane spherical, aspherical, freeform
Load lock system:	yes, loading time < 2min.

## Number of axes:

Type: 450	X,Y,Z,A,B
Travel	X = 1100mm Y = 500mm Z = 300mm A = 0-90° B = 360°

## Dimensions:

Weight:	7000kg (15400 lb.)
Dimensions: (wxhxd)	2,5m x 3,6m x 2,0m (98 x 142 x 79 inches)
Footprint:	4m x 4m 157 x 157 inches

## Power supply:

Mains requirement: volt.	400V – 3 phases +N+PE
Mains requirement: frequency	50-60 Hz
Current per phase max.:	32A
Power requirement:	max. 44 kW / Average 7 kW

## Utilities supply:

Nitrogen:	
Pressure Ion source:	2 bar g (30 psi)
Pressure vac. Chamber:	1..3 bar g (15..45 psi)
Purity:	99,9990 % (5.0)
Argon&Oxygen:	
Pressure:	2 bar g (30 psi)
Purity:	min. 99.9990%(5.0)
Compressed air:	
Pressure:	4..10 bar g (60..150 psi)
Quality class to ISO 8573-1	2 4 1
Cooling water:	
Pressure:	3..4 bar g (45..60 psi)
Temp.:	min. 16°C (61°F), max. 25°C (77°F)
Vacuum pumps exhaust	pipe DN 40-ISO KF



The RIBE-450 is a procedural plant for inert gas ion beam etching as well as for reactive ion beam etching. Backside cooling, SIMS for end point detection, Interface for clean room, beam monitoring with Faraday cup array and other helpful features are available. This plant will be launched in 3rd quarter 2015.

[www.ntg.de](http://www.ntg.de)