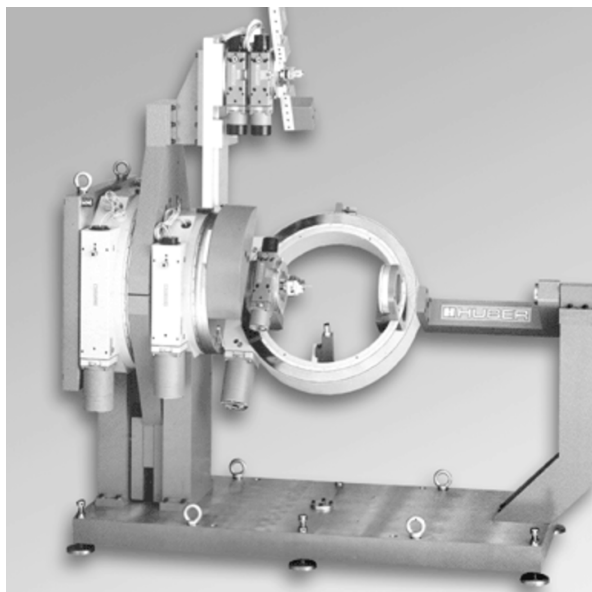




4-Circle Diffractometer 5020

The Huber diffractometer type 5020 is a 4-circle diffractometer that can be used both vertically and horizontally.

The system mainly consists of the components 440, 430 and 512.

A 2-Circle Goniometer 414, mounted on the 2-Theta arm, serves as an analyser.

Occurring forces are compensated by corresponding counter weights.

Specifications Phi-/Chi-circle:

	Phi-Circle	Chi-Circle
Travel range [°]:	360	360
Resolution [°]:	0.001*/0.002* **	0.001*
Accuracy ["]:	30	30
Repeatability (unidir.)["]:	<= 2	<= 3
Reversal error ["]:	<= 10	<= 15
Gear ratio:	360:1 / 180:1**	360:1

* with step motor, 1000 steps/revolution

** using Goniometer 410A

Specifications 2-Theta/Omega:

	2-Theta	Omega
Resolution [°]:	0.001*	0.001*
Accuracy ["]:	<= 20	<= 20
Repeatability (unidir.)["]:	<= 2	<= 2
Reversal error ["]:	<= 4	<= 4
Gear ratio:	360:1	360:1
Eccentricity [µm]:	<= 3	<= 3
Wobble ["]:	<= 2	<= 2

* with step motor, 1000 steps/revolution

Specifications system:

Sphere of confusion [mm]:	<= 0.02
Weight [kg]:	480

Accessories:

Collimator arm XYZ-cryostat carrier:	512.120
	512.120M
Counter bearing:	512.110
Slit screens:	Serie 3000
XY-stages:	optional
Control system:	9300
CCD-camera:	MiniVID
Motors:	2-/3-/5-Ph.
Limit switches:	included
Zero-point control:	9100
Goniometer heads:	Series 1000
Encoder:	incremental
	absolute
Integr. Z-stages motorised:	5104.A05M
Gear boxes (Phi):	2056.05
	2056.10
	2056.20
Gear box (Chi, Omega, 2-Theta):	2083.05
	2083.10
	2083.20
Alignment bases:	optional
Analyser:	optional

