



NCX200 Single Wire Saw

High-Speed Precision Cropping, Shaping, and Dicing

Low Cost of Ownership and High Yield

- **Yield increase** resulting from minimally destructive low-kerf cutting method
- **Material saving** based on potential kerf loss savings
- **Versatile equipment for multi-use cutting** reduces and/or eliminates the need for additional equipment expenditures
- **Low consumable costs** offer increased savings
- **Increased uptime**
- **Decreased CoO** versus slurry and blade saws
- **Capstan design** decreases non-cutting wire wear increasing wire lifetime

Consistent Quality due to Process Management

- **Tangential cutting available;** resulting in faster cuts, higher precision, superb surface finish, lower TTV, and reduced bow and warp
- **Programmable software** allows automated operation
- **Recipe management** numerous independent process recipes can be stored
- **Wire management** ability to run different wire diameter sizes, down to 60 μm
- **Reduced secondary process** reduces grinding, polishing, and other secondary processes

Simple Maintenance and environmentally friendly

- **Simple to maintain** due to accessibility and minimal moving parts
- **Quiet operation** benefits the operator and the environment
- **Ecological** use of all substances and media
- **Small footprint** with a compact, maintenance-friendly design
- **Compliant** with relevant environment and safety standards (CE)



Features | Options | Data

Features

- 9.7" Color, touchscreen Human Machine Interface (HMI) with language support(optional)
- High wire speed for increased cutting efficiency.
- Spray system increases cut quality
- Door interlock switch for added safety
- Numerous process recipes programmable through HMI
- PLC controlled tension system using load cells for feedback

Technical Data at a glance

Specification	NCX200
Work Piece Dimensions	203 mm x 203 mm x 235 mm
Work Table	Optional
Saw Dimensions	Width: 1103.93 mm / 43.46" Height: 2046.22 mm / 80.56" Depth 923.70 mm / 36.37"
Saw Weight (Max)	KG / LBS: 583 / 1285
Diamond Wire	Max capacity: Up to 6 km (60 µm) Diameters (Core Size): 60 um to 400 um
Power Requirements	208 – 230V/50-60Hz 30 Amp Single phase
Yoke Speed (mm/min)	min: 0.001 max: 200
Wire Speed	max: 15 m/s
Tension	up to 40 N
Fluid Tank	Liter / Gal: 70 / 18.5
Indexing Table Accuracy(mm)	Standard: ±0.015 Optional: ±0.001

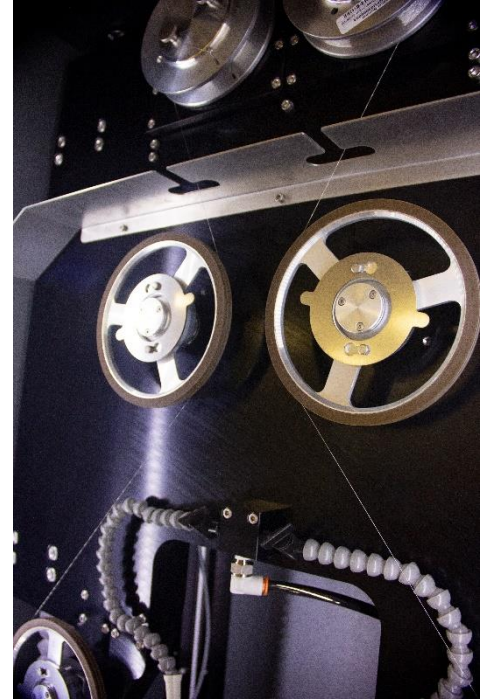
NCX200 Options

- **Encoder option** to improve table movement accuracy
- **Variety of tables** available to fit the most demanding process requirements.
 - Rotation Table
 - Tilt Table
 - Tilt and Rotation Table
 - Manual 90° Dicing Table
- **Custom Fixturing** at request
- Stainless steel enclosure / fittings for processes requiring no brass or copper
- Available MES Connection
- Available Ingot Mounting station

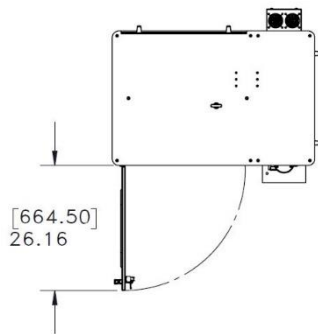
Summary of Benefits

Summary

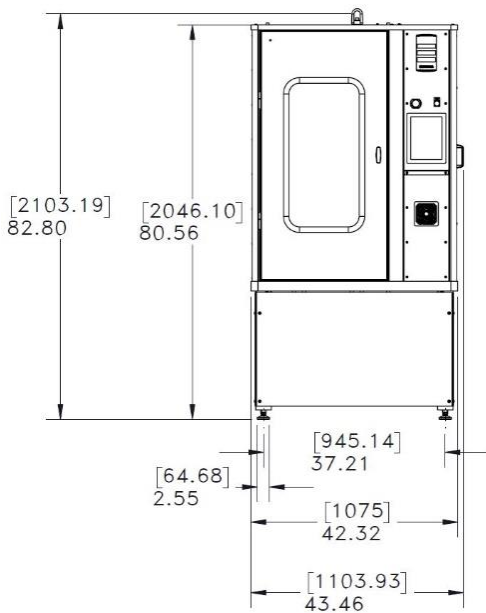
- Ideal for cutting hard and brittle materials such as: silicon, silicon carbide, quartz, fused silicon glass, ceramics, graphite, germanium, etc.
- Increased working speed over conventional slurry process
- Reproducible results deliver high-quality cuts
- Efficient wire usage - increases cutting speed and enables wire changes in minutes
- Wire break detection is a standard feature



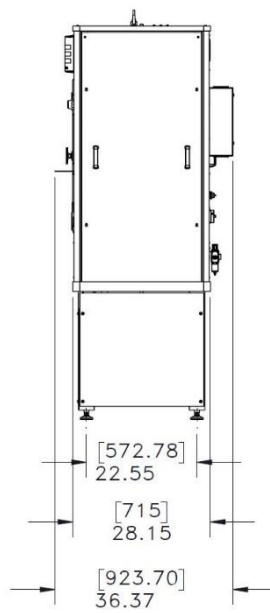
NCX200 Footprint



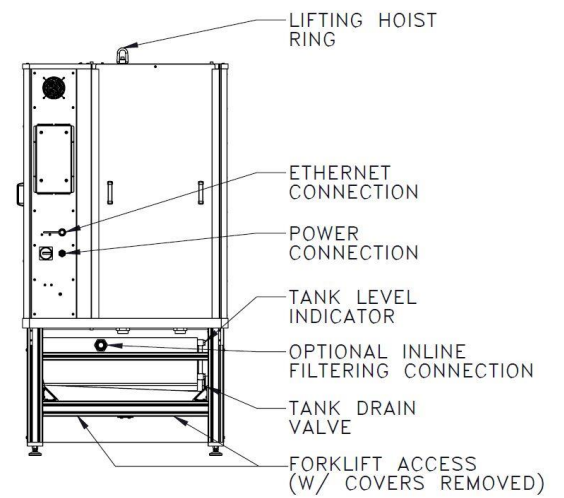
TOP VIEW



FRONT VIEW



SIDE VIEW



BACK VIEW

Electro-Plated Diamond Wire

Core	Diamond Size	Concentration	Outer Diameter
60	6-12	High	73
70	6-12	High / Ultra	83
80	6-12	High	90
	8-16	High / Ultra	95
100	6-12	High	110
	8-16	High / Ultra	116
	10-20	High	124
120	10-20	Standard / High	149
	12-25	Standard / High	156
	22-36	Standard / High	169
140	10-20	Standard / High	167
	12-25	Standard / High	174
	22-36	Standard / High	187
160	12-25	Standard / High	192
	22-36	Standard / High	192
	30-40	Standard	221
	40-50	Standard	225
175	22-36	Standard / High	225
	30-40	Standard / High	240
	40-50	Standard / High	256
200	22-36	Standard	241
	40-50	Standard / High	257
300	22-36	Standard / High	338
	30-40	Standard	356
	40-60	Standard / High	378
350	22-36	Standard	388
	30-40	Standard / High / Ultra	396
	40-60	Standard / High	423

Additional Consumable Offerings*

Cutting Fluids

- WaferKool 2010
- WaferKool 3010

Anti-Foam

- SAG 2001

Saw Cleaners

- SawKleen

Beams

- IWT 710 beam
- SK-POR beam
custom sizes available

Questions | Request for Quote

To facilitate your order, please provide the following information

Required information:

- Diamond wire
- Wire outer diameter or kerf
- Type of spool

Useful information, if known:

- Wire core diameter
- Wire speed
- Wire tension at slicing
- Diamond grit size
- Process time



*Detailed consumable product information can be provided upon request

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Designed and manufactured by IWT
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