



INIRAM

PRECISION MACHINERY, LLC

**INIRAM
Boston Headquarters**

333 NORTH MAIN STREET MIDDLETON, MA 01949

978-854-3037
info@iniram.com



Smartline Basic Machine

The new Standard for Precision Grinding

Based on the machine concept Smartline, we have configured "ready to grind" machine packages for a large variety of applications.

User Profiles

- Tool and die
- Machine manufacture
- Mold making
- General Maintenance/Repair Services
- Stamping tools

Advantages

- Highly flexible
- Competitively priced
- Lasting precision
- Comfortable machine control
- Simple operation

Important Highlights

- Separate front and rear machine bases with polymer bonded mating surface

- Allows high precision machining of individual front and rear bases
- Precise alignment of front and rear bases is achieved prior to the bonding process
- Machine base and column are manufactured from Microgranit (Polymer concrete)
 - Drastically improved rigidity
 - Optimized dampening characteristics
 - High thermal stability for base and column
 - Environmentally friendly due to the cold casting process

Machine Concept

- Four table drive system options
 - Hydraulic cylinder
 - Timing Belt Drive (ZRT)
 - Ball screw
 - Hydrostatic Ball screw
- Combined with choice of:
 - V/flat guide-ways
 - Linear guide-ways

Control

- xpressCube (PLC control for surface grinding)
- xpressCube Pro (entry-level profile grinding)
- Siemens 840D full CNC

Smartline	Basic N	Basic BD	Basic BL
Grinding width (mm)	400	600	750
Grinding length (mm)	600/1000/1500	600/1000/1500/2000	1000/1500/2000
Grinding height (mm)	500	500(+200)	500
Spindle motor (kW)	5,5	10	10
Spindle cone (mm)	36	60	60
Wheel size (mm)	300x50x76,2	400x100x127	400x100x127



Smartline Kombi - Machine Technology Custom Configuration

The new Standard for Precision Grinding

The Smartline series covers the entire range of travelling table machines. This concept fulfills several grinding requirements. This includes simple surface grinding via pendulum process, high speed reciprocation grinding, slot and profile grinding as well as creep-feed grinding. The flexible, modular system allows a multitude of configuration possibilities with the various components.

Smartline Basic

For standard profile and surface grinding, we have pre-configured a group of machine packages that are fully equipped and "ready to grind". The basic package incorporates a hydraulic drive in the travelling table and offers a variety of options including alternative drive methods including linear guides with timing belt drive all the way to linear guides with hydrostatic ball-screw drive. Additionally, due to our modular design, a grinding width of our N size machine can be combined with a reinforced BD sized column. A variety of control options expand your options even further.

Smartline Kombi

When configured in a combination version, this machine truly encompasses an almost limitless variety of machine configurations to meet a nearly equal number of applications. Choices of grinding width, height, table drive mechanism and dressing options allow a complete customization process. Any combination of our standard grinding widths and heights can be combined in this version. Dressing options cover the full range of simple single point dressing all the way to head mounted roll dressers capable of CD grinding operations.

Advantages

- good price to performance ratio
- high spindle capacity
- head mounted roll dressing units
- process flexibility
- 4 and 5 axis capabilities

Important Highlights

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Machine Concept

- Four table drive system options
 - Hydraulic cylinder
 - Timing Belt Drive (ZRT)
 - Ball screw
 - Hydrostatic Ball screw
- Combined with choice of:
 - V/flat guide-ways
 - Linear guide-ways

Three control system choices:

- xpressCube (PLC control for surface grinding)
- xpressCUbe Pro (entry-level profile grinding)
- Siemens 840D full CNC

Smartline	Basic N	Basic BD	Basic BL	Kombi
Grinding width (mm)	400	600	750	400 / 600 / 750
Grinding length (mm)	600/1000/1500	600/1000/1500/2000	1000/1500/2000	600 / 1000 / 1500 / 2000*
Grinding height (mm)	500	500(+200)	500	500 / 700 / 950 / 1200
Spindle motor (kW)	5,5	10	10	5,5 - 52
Spindle cone (mm)	36	60	60	36 / 60 / 75** / 90**
Wheel size (mm)	300x50x76,2	400x100x127	400x100x127	300 x 50 x 76,2 / 400 x 100 x 127 / 500 x 100 x 203,2

* not for grinding width 400 mm

** in special cases with wheel size 500x100x127 mm