EPO 6200

EPOXY RESIN FOR CONCRETE

// High technology resin for concrete //

Honrizontale CNC lathe

Liquid epoxy resin for Machine tool mainframe stabilising.

1. Very low viscosity for filler integration
2. Low toxicology
3. Good wetability of the filler (filler is calibrated granite)
4. Low exothermic reaction on very high thickness: part dimensions 2000X400X600 mm.
5. Resin Mixing ratio =100:17 allowing a very high filling rate of 90% of total mass).

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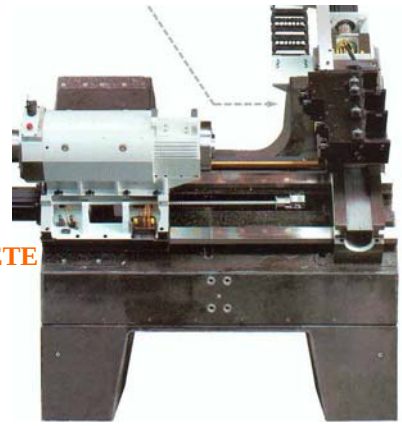
APPLICATION DESCRIPTION

Embedding machine tool mainframe in concrete resin, as an alternative to traditional cast iron or vibrated concrete construction (high density for public works).

This concrete resin block supports entire structure of the lathe body frame (bed) on which are assembled: chuck, tool station turret, rulers, spindle, cross slide, tailstock etc.

The following benefits make a **real innovation** in machine tool construction.

LATH BED CONCRETE BLOCK



LATH BED CONCRETE BLOCK WITH ALL EQUIPMENT

Application benefits.

•Very high machining accuracy thanks to lack of vibration and heat transmission even at high speed. **Reduces by 3 vibration amplitudes, heat conductibility 15 times lower compared with cast Iron.**

•Dimensional stability, no ageing, no cracks. Thanks to its resilience, the blocks break instead of slowly deteriorating which causes loss in machining precision (maintenance security). **Structure rigidity (shock absorption) 8 times higher compared to cast iron.**

• Monobloc main frame.

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TECHNICAL SPECIFICATION

Viscosity at 23°C	**180 mPas**	Optimum castability for highly filling rate (granite !)
Pot life at 25°C	70- 80 mns	Good value.
TG	**69°C**	Good value.
Exotherm	**95°C**	High thickness casting without mould deterioration
demoulding time	24 Hours at 23°C	No needs for faster demouldings.
Full hardening	4-5 days	According to epoxy hardening process.
Traction modulus	**3000MPa**	Very good rigidity
Traction at break	69Mpa	Good value.
Compression at break	85Mpa	Good value.
Elongation at break	**5,80%**	Very good elasticity.
Toxicology	Irritating	Typical for epoxy systems.

PROCESSING PRINCIPLE

A) Complex Steel moulds are subcontracted (plastic hollow inserts and steel inserts.

b) Mixing resin's hardener and filler in a cement mixer then pouring of determined quantity into the moulds by successive castings.

c)Between each casting, mould is placed on vibrating table to achieve homogeneous filled mixing (granitic micro blocks best aggregate and adjust to each other)?

d) Demoulding after 24 Hours. Lathe beds can then be handled.

e) Lathe beds are grinded, machined for plane ability, drilled etc.... Equipment is then installed on the bed.

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PACKAGING -REFERENCES

CODES	DESIGNATION
O6175	RESIN 220KG
O6176	HARDENER 187 KG
O6177	RESIN 1100 KG
O6178	HARDENER 900 KG

Available in large packagings