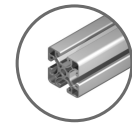
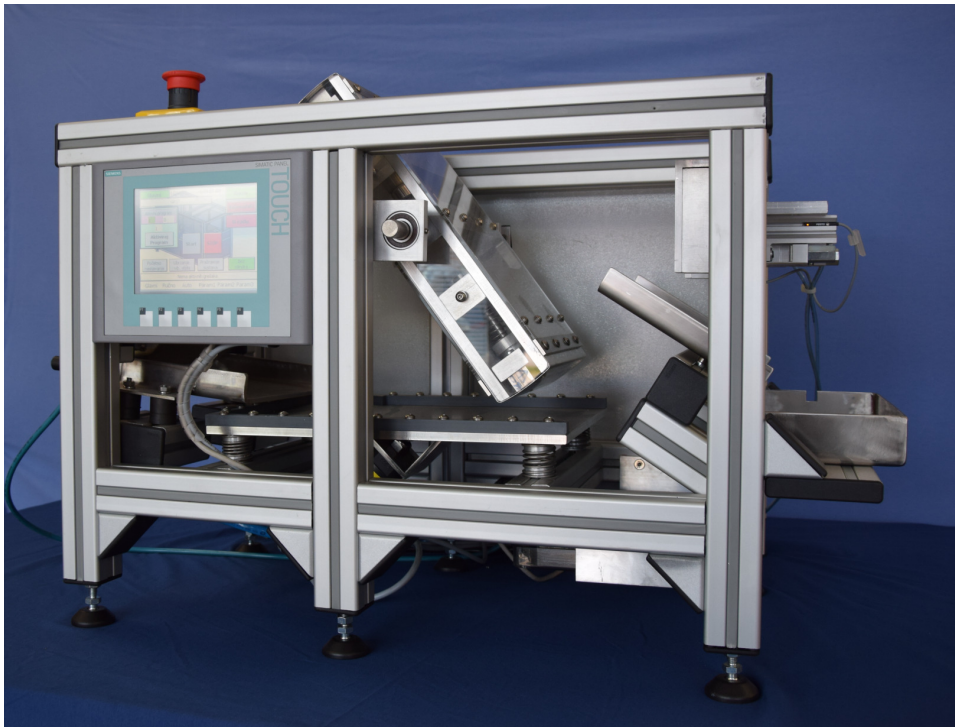


MARA | MACHINE FOR MAGNETIC SEPARATION



CONSTRUCTION
Aluminium profiles



TRANSPORT
Stepper motor
Transport - pneumatic vibrators

WORKING PRINCIPLE

Magnetic material collects on sheet metal under influence of primary magnet. In specified position primary magnet, under influence of second magnet, moves back on its guides.

Material falls of sheet metal because backed primary magnet doesn't have enough force to hold it.

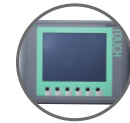
USAGE

Separation of nonmagnetic from magnetic materials

ADVANTAGES

With magnetic material "popping" technology the final result is separation that provides 0% defective material among correct ones. By using permanent magnets instead of electromagnets we avoided complicated installation of electrical current conduits on rotor.

Regulated vibrating plate ensures optimal material speed and distribution.



CONTROL
Siemens PLC S7/1200
Simatic KTP 600

INDUSTRIAL AUTOMATION / CUSTOM MADE MACHINES

Enso

+385 (43) 445 - 189

• ISO 9001

www.enso.hr • enso@enso.hr

MAGNETIC SEPARATION PROCESS

MACHINE LOADING

Unsorted material is loaded in input funnel.

Material moves and distributes in one layer on plate under influence of pneumatic vibrator.

TRANSPORT PLATE LOADING AND MATERIAL DISTRIBUTION

Pneumatic vibrator moves and distributes material in one layer on transport plate

SEPARATION

Rotor with moving primary magnets collects magnetic material on rotor surface.

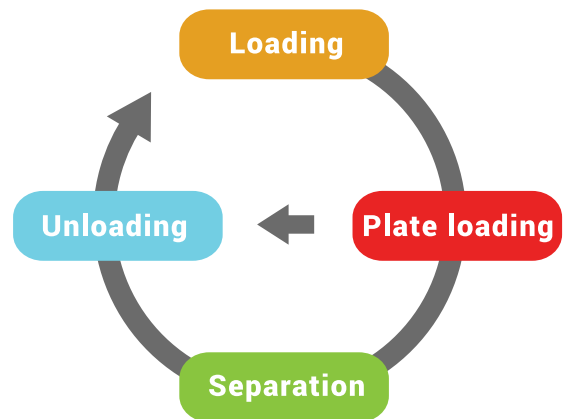
During rotation, in specified position, under influence of secondary magnet primary magnet moves back and unloads material from its surface.

MACHINE UNLOADING

Nonmagnetic material moves under rotor and falls into output container for nonmagnetic material

Magnetic material, unloaded of rotor, falls into output channel and slides to magnetic material container.

PROCESS



MACHINE PARTS

VIBRATIONAL FUNNEL WITH PLATE



TRANSPORT TABLE

Output container with nonmagnetic material



ROTOR WITH PRIMARY MAGNETS



SECONDARY MAGNET WITH OUTPUT CHANNEL



OUTPUT CONTAINER WITH MAGNETIC MATERIAL

INDUSTRIAL AUTOMATION / CUSTOM MADE MACHINES

Enso

+385 (43) 445 - 189

ISO 9001

www.enso.hr • enso@enso.hr