

SCREENING EQUIPMENT

+ HARKEN.PLUS BAR SCREENS

HARKEN.PLUS (HRK+) mechanical screens are used for reliable removal of debris from process liquid flow by means of coarse and fine screening in large, medium and small sized treatment plants.

HRK+ is mainly consisting of:

- + Robust frame profiled as guiding track for revolving rakes,
- + Replaceable bar rack made of equally spaced bar profiles,
- + Apron plate extending up to discharge with enclosed chute,
- + Multiple rakes attached to endless chains at both sides,
- + Heavy duty drive unit with strong shaft, sprockets and bearings,
- + Counter wiper with replaceable scraper.

The screen bars are cleaned frequently by multiple rakes which are connected to an endless chain that is specially developed for reliable operation under wastewater. The rakes are positioned in such a manner that while some are moving up between the bars to clean the screenings, others are descending towards the bottom of the channel. While descending the rakes are far from the bars and after turning around the bottom guide, they go up between the bars to clean the clogged screen. By the help of multiple rakes high screenings discharge capacity and low head loss is achieved. Since the rakes are directly connected to the revolving chain the installation height above operation level is very low even in very deep channels.

Three different types of HRK+ have been created as standard design to meet different capacity requirements in a cost efficient and reliable way:

- + HRK+G is designed to meet the requirements of large capacity water wastewater treatment plants and intake structures for power plants.
- + HRK+M is created to meet expectations of large to medium size water and wastewater treatment plants.
- + HRK+K is used for small to medium capacity wastewater treatment plants as coarse and fine screening equipment.

	HRK+K	HRK+M	HRK+G
Bar spacing (mm)	6 ÷ 25	6 ÷ 100	10 ÷ 100
Channel width (mm)	400 - 800	800 - 2500	2500 - 5000
Discharge height (mm)	8 m	15 m	20 m
Inclination	60° - 75°	70° - 85°	75° - 90°

