



MACHINE CONTAMINATION SYMBOLS

müller efficiency matters

- // The demands on a high-pressure unit vary dramatically depending on the degree of machine contamination
- // Developed symbols are intended to indicate at a glance which is the correct high-pressure unit based on the degree of machine contamination
- // Certain high-pressure units may be the right choice for a range of requirements



// Low degree of contamination (e.g. machining steel, coarse chips, few fine chips)



// Medium degree of contamination (e.g. machining steel, stainless steel, mixed fine/coarse chip ratio)



// High degree of contamination (e.g. aluminium, brass, cast, titanium, mainly fine chips from finishing and milling)



// Extreme degree of contamination (e.g. cast/graphite processing, finest finishing, high occurrence of sludge)

DEGREE OF MACHINE CONTAMINATION



Degree of machine contamination with metals (in relation to coarse/fine chip)	High-pressure filter concept (CL and CS)	Chip conveyor concept (combistream)	Process flow (empirical values)	Müller symbols
Up to 30% fine chip volume	Exchangeable filter 25, 40 or 60 µm	BK10 / BK30	 / Filter cleaning (change) up to once a month. / Machine tank cleaned up to once a month. / BK30: Base cleaning machine tank (manual cleaning maximum twice a year). 	
Fine chip volume 30 - 50%	Exchangeable filter as a double changeover filter 25, 40 or 60 µm	BK10 / BK30	/ Filter cleaning (change) possible several times a month. / Machine tank cleaned up to once a month. / BK30: Base cleaning machine tank (manual cleaning maximum twice a year).	

DEGREE OF MACHINE CONTAMINATION



Degree of machine contamination with metals (in relation to coarse / fine chip)	High-pressure filter concept (CL and CS)	Chip conveyor concept (combistream)	Process flow (empirical values)	Müller symbols
Fine chip 30-70% (high wool / whirly chip content, fine chips aluminium)	Automatic filter 30, 40 µm	BK30	/ Filter cleans itself automatically. / Base cleaning machine tank (manual cleaning maximum twice a year).	
Fine chip volume 70% greater	Automatic filter 30, 40 µm	BK11 / BK31	/ Filter cleans itself automatically. / Machine tank cleaned up to once a month. / BK31: Base cleaning machine tank (manual cleaning maximum twice a year).	

DEGREE OF MACHINE CONTAMINATION



Degree of machine contamination with metals (in relation to coarse / fine chip)	High-pressure filter concept (CL and CS)	Chip conveyor concept (combistream)	Process flow (empirical values)	Müller symbols
Fine chip volume 100% (fine chip brass, high milling content)	Automatic filter 30, 40 µm	BK31	/ Filter cleans itself automatically. / Base cleaning machine tank (manual cleaning maximum twice a year).	
Very fine contamination (graphite processing, finest finishing, high occurrence of sludge)	Maintenance- optimised compact belt filter 25, 40 µm	BK31	/ Chips and sludge discharged by patented paddle system / Base cleaning machine tank (manual cleaning maximum twice a year).	