

SuperBetsy Independent pump system

Your application – Our pump system



SuperBetsy - Independent pump system

Quality, Knowledge and Innovation is what the mobile pump system SuperBetsy stands for. By concentrating on engineering, assembling and quality assurance we are able to produce our products at our production site at the highest technical and quality levels. In conjunction with regional suppliers enabling short delivery times we succeed in providing our customers with the best solutions for their applications in record time.

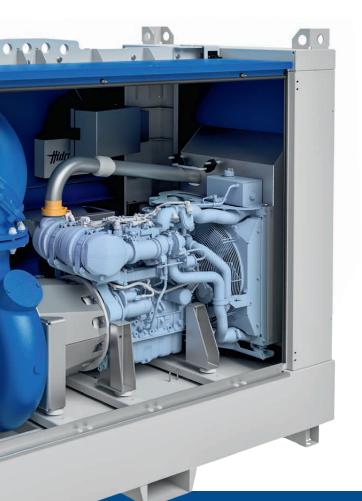
Hidrostal-Screw Centrifugal Impeller an all-rounder

Large solids, fibrous media, viscous or problematic fluids such as bentonite and raw sewage, are no problem for the Hidrostal pump. The **clog free** original screw centrifugal impeller with free passage of **75 mm to 120 mm** guarantees an almost undisturbed operation. The excellent NPSH-values in combination with high efficiency, provide an extremely efficient use. Through the special construction of the screw centrifugal impeller, **gentle handling** of sensitive contents in the media, such as fish and other small organisms present during surface water dewatering, are secured.



- \rightarrow Manufactured in Germany
- \rightarrow Developed from specialists
- → Made for specialists





BetsyPrime - innovative vacuum system

In combination with a rotary vane vacuum pump and the newly designed vacuum chamber (as well as the use of different sensors), is the vacuum system, the **heart** of each SuperBetsy.

BetsyPrime stands for safe and reliable suction of the medium to be pumped. The built-in sensor technology shortens the operation time of the vacuum pump to a minimum and guarantees a long lifetime. **Contamination of the vacuum** pump with pumped medium is **prevented** by the innovative locking system which is electronic and mechanically controlled.

Product properties

- \rightarrow Powerful
- \rightarrow Low-maintenance
- \rightarrow Durable
- \rightarrow High efficiency
- \rightarrow Maximum clog resistance
- \rightarrow Minimal operating costs
- \rightarrow Latest control electronics

- \rightarrow Latest engine technology (EU-Stage V)
- \rightarrow Low total weight
- \rightarrow Ultra silent
- \rightarrow Fish-friendly
- → Remotely monitorable
- \rightarrow Stackable
- \rightarrow Trailer capable

SuperBetsy - From Germany to the World

With a worldwide distribution network spread across all continents, we offer excellent service in advice, distribution and technical support. With individual sales branches serving their local markets our customers can be assured of our attention at all times.

Our proven specialists have excellent knowledge in the design of our machines and support our users with their individual requirements.

Development

From the design of the prototype to series production, this is how the development process of a SuperBetsy can be described.

Many years of experience of our own rental business enables us to develop ideas for even better, needs based, more effective machines. The close interlinking of practice, development and manufacturing under one roof, guarantees the fast realization of practical needs to our customers. We see special solutions as a challenge that we are happy to face. Experience dictates the requirements that our customers have for their machines and enables us to specifically develop solutions for it.



- \rightarrow Latest production site
- \rightarrow Integrated development department
- → Worldwide distribution network
- → Pleased customers





Manufacturing

Our modern production hall alongside qualified employees is the basis for production of our independent pump system, SuperBetsy. At several assembly sites the different components of the machine are prepared and assembled. With this we reduce the production times to a minimum and can guarantee short delivery times to our customers.

Quality

We set high quality requirements in our SuperBetsy pump system with regard to processing and durability. To ensure this claim we check all machines with a standardized test procedure before they leave our site.

In addition to the comprehensive functional test at the test pit integrated in our production hall, all SuperBetsy pump systems pass through an endurance test under real-life conditions.

This test procedure which is monitored by experienced engineers serves to ensure high quality and customer satisfaction.

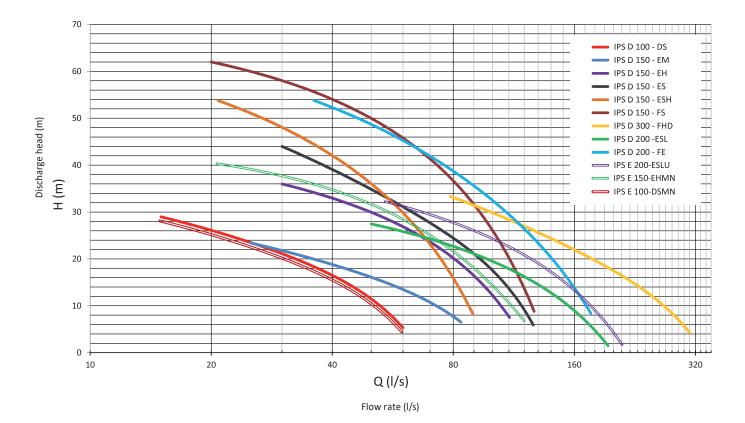
SuperBetsy - Product overview

The chart shows the technical data and model range of our powerful, self-sufficient pump system SuperBetsy.

Leistungsdaten SuperBetsy							
	Hmax	Qmax	Kugeldurchgang	Motortyp	Abgasstufe	Leistung bei 1500 min-1	Abmaße (lxbxh)
	[m]	[m³/h]	[mm]		[EU/EPA]	[kW]	[mm]
IPS D 100-DS	29	216	100	Hatz 3H50T	V/Tier 4 final	17	2418×1145×1776
IPS D 150-EM	23	302	100	Hatz 3H50T	V/Tier 4 final	17	2407×1145×1776
IPS D 150-ESH	54	324	75	Hatz 3H50TICD	V/Tier 4 final	29	2385×1145×1776
IPS D 150-EH	36	400	100	Hatz 3H50TICD	V/Tier 4 final	29	2407×1145×1776
IPS D 150-ES	44	450	90	Hatz 3H50TICD	V/Tier 4 final	29	2407×1145×1776
IPS D 150-FS	62	457	75	Hatz 4H50TICD	V/Tier 4 final	38	2446×1145×1910
IPS D 200-ESL	28	695	115	Hatz 3H50TICD	V/Tier 4 final	29	2387×1145×1910
IPS D 200-FE	54	634	90	Hatz 4H50TICD	V/Tier 4 final	38	2461×1145×1910
IPS D 300-FHD	33	1116	120	Deutz 2.9 TCD L4	V/Tier 4 final	46	2795×1225×2051
IPS E 100-DSMN	29	216	100	IE 3/160L4	-	15	2418×1145×1730
IPS E 150-EHMN	40.5	481	100	IE 3/200L4	-	30	2416×1145×1730
IPS E 200-ESLU	32	760	100	IE 3/225M4	-	45	2398×1145×1730

The following Q-H-Diagram shows the **effective System** curves of the SuperBetsy model range.

The pressure losses occurring between suction- and discharge pipe are considered. It will be pictured the **real curve**.



SuperBetsy Q-H-Diagram, effective performance curve under full load

Product highlights



- → Hidrostal hydraulics with original screw centrifugal impeller
- \rightarrow Excellent pump efficiency
- \rightarrow Max solids passage (75-120 mm)
- \rightarrow Large suction height (up to 8.5 m)
- → Very high flow rates and discharge heights
- \rightarrow Flow optimized suction and pressure pipes
- → Newly developed vacuum system BetsyPrime
- → Completely new canopy concept (without middle traverse)

- → Stackable canopies
- \rightarrow Large volume Polyethylene fuel tank
- → Latest engine technology according to current emission regulations (EU- and US EPA-standard)
- ightarrow Low sound emission
- \rightarrow Latest control electronics
- \rightarrow Remote control via GPS/GSM
- $\rightarrow\,$ Manual and automatic operating mode
- → Vibration monitoring of the bearing frame pump (option)
- → Suction and pressure pipes with universal flanges for connecting DIN and ANSI flanges
- → SuperBetsy App (for an easy setting on site)

SuperBetsy - Product overview

Hydraulics Do	04R-SMN3R					
	04R-31VIN3R	E125-M03R	E125-H03R	E125-S03R	E125-SH3R	F04K-S03
Flow rate max. [m³/h] 21	16	302	400	450	324	457
Discharge head max. [m] 29	9	23	36	44	54	62
Free ball passage [mm] 10	00	100	100	90	75	75
Maximum suction height [m] 8.	.5	8.5	8.5	8.5	8.5	8.5
Material impeller St	tainless steel	Stainless				
Material wear liner Hi	lidrohard	Hidrohard	Hidrohard	Hidrohard	Hidrohard	Hidrohar
Pipe connections						
Suction flange [DN] 15	50	200	200	200	200	250
Discharge flange [DN] 10	00	150	150	150	150	150
Nominal pressure stage [PN] 10	0	10	10	10	10	10
Flange connection ur	niversal (DIN/ANSI)	universal				
Vacuum pump						
Type Ro	otary vane	Rotary va				
Nominal pumping speed [m ³ /h] 50	0	50	50	50	50	50
Engine Ha	latz	Hatz	Hatz	Hatz	Hatz	Hatz
Type 31	H50T	3H50T	3H50TICD	3H50TICD	3H50TICD	4H50TIC
Emission level [EU/EPA] V/	/Tier 4 final	V/Tier 4 i				
Maximum power [kW] 18	8.4	18.4	43.7	43.7	43.7	55.4
Power at 1500 rpm [kW] 17	7	17	29	29	29	38
Capacity fuel tank [l] 40	00	400	400	400	400	400
Operating time at 1500 rpm at BEP [h] 12	29	78	70	61	93	42
Control De	eep Sea, Electronics	Deep Sea				
Type E8	800	E800	E800	E800	E800	E800
Display	3.4" LCD Display backlit)	3.4" LCD Display (backlit)	3.4" LCD Display (backlit)	3.4" LCD Display (backlit)	3.4" LCD Display (backlit)	3.4" LCD [(backlit)
Operating mode M	Ianual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual//
Speed control	electronically	Electronically	Electronically	Electronically	Electronically	Electroni
Noise level						
Sound pressure level Lp @ 7 m (at maximum speed) [dB (A)]	8	62	66	67	67	66
Canopy						
Global dimensions (lxbxh) [mm] 24	418×1145×1776	2407×1145×1776	2407×1145×1776	2407×1145×1776	2385×1145×1776	2446×11
Weight with fuel [kg]	550	1715	1790	1790	1775	1900
Forklift slots (s) (Center - Center) [mm]	00	900	900	900	900	900
Lifting point ce	entral crane eye	central cr				
Stackability Ye	es	Yes	Yes	Yes	Yes	Yes

D 150-FS	IPS D 200-ESL	IPS D 200-FE	IPS D 300-FHD	IPS E 100-DSMN	IPS E 150-EHMN	IPS E 200-ESLU
R	E08R-SLU3R	F06K-EMN3R	F10K-HD3R	D04R-SMN3R	E06R-HMN3R	E08R-SLU3R
	395	634	1116	216	481	760
	28	54	33	29	40.5	32
	100	115	120	100	100	100
	8.5	8.5	8.5	8.5	8.5	8.5
steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
d	Hidrohard	Hidrohard	Hidrohard	Hidrohard	Hidrohard	Hidrohard
	250	250	300	150	200	250
	200	200	300	100	150	200
	10	10	10	10	10	10
(DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)
ine	Rotary vane	Rotary vane	Rotary vane	Rotary vane	Rotary vane	Rotary vane
	50	50	50	48	48	48
	Hatz	Hatz	Deutz	Three-phase asynchron- ous motor	Three-phase asynchron- ous motor	Three-phase asynchron ous motor
C	3H50TICD	4H50TICD	2.9 TCD L4	IE 3 /160L4	IE 3 /200L4	IE 3/225M4
inal	V/Tier 4 final	V/Tier 4 final	V/Tier 4 final	-	-	-
	43.7	55.4	55.4	15	30	45
	29	38	46	15	30	45
	400	400	460	-	-	-
	52	35	39	-	-	-
a, Electronics	Deep Sea, Electronics	Deep Sea, Electronics	Deep Sea, Electronics	Deep Sea, Electronics	Deep Sea, Electronics	Deep Sea, Electronics
	E800	E800	E800	E800	E800	E800
Display	3.4" LCD Display (backlit)	3.4" LCD Display (backlit)	3.4" LCD Display (backlit)	3.4" LCD Display (backlit)	3.4" LCD Display (backlit)	3.4" LCD Display (backlit)
Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic
ically	Electronically	Electronically	Electronically	Electronically (frequency converter)	Electronically (frequency converter)	Electronically (frequency converter)
				(frequency converter)	(nequency converter)	(frequency converter)
	67	66	66	55	57	56
45×1910	2387×1145×1910	2461×1145×1910	2795×1225×2051	2418×1145×1730	2418×1145×1730	2398×1145×1730
	1900	2005	2565	1140	1425	1660
	900	900	900	900	900	900
ane eye	central crane eye	central crane eye	central crane eye	central crane eye	central crane eye	central crane eye
	Yes	Yes	Yes	Yes	Yes	Yes
	100	103	103	103	103	103

SuperBetsy - Equipment features

Our newly developed mobile pump system SuperBetsy can be used for the most demanding applications, characterized not only by their robustness and power but above all through their numerous innovations. Our machines are equipped with the following components straight from the factory:

Equipment features

- → Sound proof canopy (RAL 5010)
- → Flow optimized suction- and pressure pipes
- → Hydraulics in wear-resistance execution
- → Diesel engine according to latest emission regulations
- → Polyethylene fuel tank with above-average volume
- → Oil quick change system for engine, hydraulics and vacuum pump
- → Vacuum system BetsyPrime
- \rightarrow Vacuum pump 40 m³/h
- → Digital control panel
- → Electronic fuel sender
- → Replacement v-belt (pre-mounted)
- → Hand diaphragm pump for dewatering of leakage pan and hydraulics

ttidrostal 🔒

- → Electrode set for level monitoring in automatic mode
- → Powerful starter battery

Options

- → Changeover valve for connecting an external fuel tank
- ightarrow Fuel tank in special size
- → Auxiliary heating for use in cold areas
- → Vibration sensor
- \rightarrow Canopy in special paint work
- → Additional elements for level monitoring in automatic mode (float switch set, flood probe)
- → Extended warranty 2 or 4 years (see warranty terms of Hidrostal Pumpenbau GmbH)



Optional accessory packages



Package sensors

- \rightarrow GPS/GSM module and antenna (4G)
- → Pressure sensors (suction-/discharge pipe)

Package operation safety

- → Additives to protect the diesel engine (Diesel-flow-fit, Anti-bacterial-Diesel-additive)
- \rightarrow Battery master switch
- → Battery charger (pre-mounted)



Package light

- → LED periphery lighting for night use (removable mounted at canopy)
- \rightarrow LED interior lighting
- \rightarrow Reinforced battery



Package maintenance

- → Filters (engine, vacuum pump, vacuum chamber)
- → Oil (engine, vacuum pump)



Accessory

- \rightarrow Trailer (low loader tandem axle)
- ightarrow Suction and pressure hoses
- \rightarrow Connection couplings (Perrot, Bauer, Anfor, ect.)
- → Fittings



General information – Sources of supply

If you are interested in our products or you require additional information please contact your nearest Hidrostal-branch or visit us on the internet under **hidrostal.com**

We would be glad to advise you.

Hidrostal pumps

Hidrostal pumps are used in numerous branches and industries due to their excellent pumping characteristics. They convey a wide variety of liquids and materials with low pulsation and gentle handling. Our specialists select the suitable material combinations and adapt each pump individually to the conditions on site. This approach ensures that Hidrostal pumps prove their worth even in difficult applications and thus achieve the best results in terms of efficiency, energy efficiency and low life cycle costs. Make a quick and accurate pump selection: www.hidrostal.com/pumpselector.php



- → non-clogging delivery
- \rightarrow high suction capacity
- ightarrow gentle conveying due to low shear forces
- \rightarrow high efficiency
- ightarrow stable characteristic curve
- \rightarrow long service life
- \rightarrow low pulsation
- ightarrow continuous, speed proportional conveying
- ightarrow high pressure stability







PR10069ENc-SuperBet: