

SuperBetsy Independent pump system

Your application – Our pump system



SuperBetsy - Independent pump system

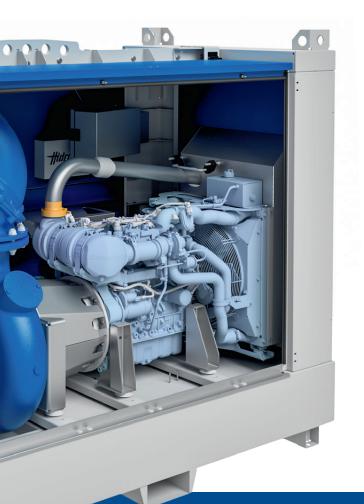
Quality, Knowledge and Innovation is what the mobile pump system SuperBetsy stands for. By concentrating on engineering, assembling and quality assurance we are able to produce our products at our production site at the highest technical and quality levels. In conjunction with regional suppliers enabling 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.

- → Manufactured in Germany
- → 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
- → 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
- \rightarrow 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.

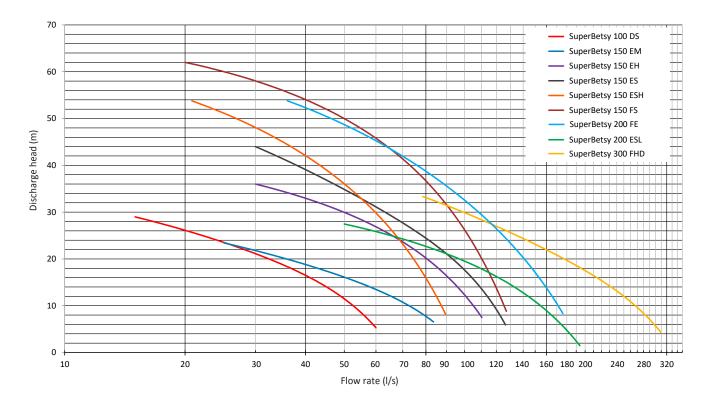
This test procedure which is monitored by experienced engineers serves to ensure high quality and customer satisfaction.

SuperBetsy - Product overview

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

Performance da							
	Hmax	Qmax	Ball passage	Engine type	Emission level	Power at 1500 min-1	Dimensions (lxbxh)
	[m]	[m³/h]	[mm]		[EU/EPA]	[kW]	[mm]
IPS 100-DS	29	216	100	Hatz 3H50T	V/Tier 4 final	17	2418 x 1145 x 1776
IPS 150-EM	23	302	100	Hatz 3H50T	V/Tier 4 final	17	2407 x 1145 x 1776
IPS 150-ESH	54	324	75	Hatz 3H50TICD	V/Tier 4 final	29	2385 x 1145 x 1776
IPS 150-EH	36	400	100	Hatz 3H50TICD	V/Tier 4 final	29	2407 x 1145 x 1776
IPS 150-ES	44	450	90	Hatz 3H50TICD	V/Tier 4 final	29	2407 x 1145 x 1776
IPS 150-FS	62	457	75	Hatz 4H50TICD	V/Tier 4 final	38	2446 x 1145 x 1910
IPS 200-ESL	28	695	115	Hatz 3H50TICD	V/Tier 4 final	29	2387 x 1145 x 1910
IPS 200-FE	54	634	90	Hatz 4H50TICD	V/Tier 4 final	38	2461 x 1145 x 1910
IPS 300-FHD	33	1116	120	Deutz 2.9 TCD L4	V/Tier 4 final	46	2795 x 1225 x 2051

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
- → 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)
- \rightarrow 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

Description	IPS 100-DS	IPS 150-EM	IPS 150-EH	IPS 150-ES
Hydraulics	D04R-SMN3R	E125-M03R	E125-H03R	E125-S03R
Flow rate max. [m³/h]	216	302	400	450
Discharge head max. [m]	29	23	36	44
Free ball passage [mm]	100	100	100	90
Maximum suction height [m]	8.5	8.5	8.5	8.5
Material impeller	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Material wear liner	Hidrohard	Hidrohard	Hidrohard	Hidrohard
Pipe connections				
Suction flange [DN]	150	200	200	200
Discharge flange [DN]	100	150	150	150
Nominal pressure stage [PN]	10	10	10	10
Flange connection	universal (DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)
Vacuum pump				
Туре	Rotary vane	Rotary vane	Rotary vane	Rotary vane
Nominal pumping speed [m∛h]	40	40	40	40
Engine	Hatz	Hatz	Hatz	Hatz
Туре	3H50T	3H50T	3H50TICD	3H50TICD
Emission level [EU/EPA]	V/Tier 4 final	V/Tier 4 final	V/Tier 4 final	V/Tier 4 final
Maximum power [kW]	18.4	18.4	43.7	43.7
Power at 1500 rpm [kW]	17	17	29	29
Capacity fuel tank [l]	400	400	400	400
Operating time at 1500 rpm at BEP [h]	129	78	70	61
Control	Deep Sea Electronics	Deep Sea Electronics	Deep Sea Electronics	Deep Sea Electronics
Туре	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)
Operating mode	Manual / Automatic	Manual / Automatic	Manual / Automatic	Manual / Automatic
Speed control	Electronically	Electronically	Electronically	Electronically
Noise level				
Sound pressure level Lp @ 7 m (at maximum speed) [dB (A)]	58	62	66	67
Canopy				
Global dimensions (lxbxh) [mm]	2418 x 1145 x 1776	2407 x 1145 x 1776	2407 x 1145 x 1776	2407 x 1145 x 1776
Weight with fuel [kg]	1650	1800	1900	1900
Forklift slots (s) (Center - Center) [mm]	900	900	900	900
Lifting point	central crane eye	central crane eye	central crane eye	central crane eye
Stackability	Yes	Yes	Yes	Yes

IPS 150-ESH	IPS 150-FS	IPS 200-ESL	IPS 200-FE	IPS 300-FHD
E125-SH3R	F04K-S03R	E08R-SLU3R	F06K-EMN3R	F10K-HD3R
324	457	695	634	1116
54	62	28	54	33
75	75	100	115	120
8.5	8.5	8.5	8.5	8.5
Stainless steel				
Hidrohard	Hidrohard	Hidrohard	Hidrohard	Hidrohard
200	250	250	250	300
150	150	200	200	300
10	10	10	10	10
universal (DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)	universal (DIN/ANSI)
Rotary vane				
40	40	40	40	40
Hatz	Hatz	Hatz	Hatz	Deutz
3H50TICD	4H50TICD	3H50TICD	4H50TICD	2.9 TCD L4
V/Tier 4 final				
43.7	55.4	43.7	55.4	55.4
29	38	29	38	46
400	400	400	400	460
93	42	52	35	39
Deep Sea Electronics				
E800	E800	E800	E800	E800
3.4" LCD Display (backlit)				
Manual / Automatic				
Electronically	Electronically	Electronically	Electronically	Electronically
67	66	67	66	66
2385 x 1145 x 1776	2446 x 1145 x 1910	2387 x 1145 x 1910	2461 x 1145 x 1910	2795 x 1225 x 2051
1900	2050	2050	2150	2810
900	900	900	900	900
central crane eye				
Yes	Yes	Yes	Yes	Yes

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

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

Options

- → Changeover valve for connecting an external fuel tank
- \rightarrow 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)
- \rightarrow Suction and pressure hoses
- → 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

Due to their outstanding characteristics, Hidrostal pumps are used in numerous municipal and industrial sectors all around the world. Our pumps are custom-made and are specially tailored to the needs of each location. Our specialists select the suitable material combinations and individually adapt every pump to the local conditions. We ensure with this process that Hidrostal pumps are successful in difficult applications and achieve the best results with respect to performance, energy efficiency and low life-cycle costs. For further information visit **hidrostal.com**



- \rightarrow clog-free pumping
- → high suction capacity
- ightarrow gentle delivery due to low shear forces
- → high efficiency
- → stable, steep pump curve
- → long service life
- → low pulsation
- \rightarrow continous flow proportional to the speed
- ightarrow high pressure stability across a wide speed range



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PR10069/2021-E