



	HWM	HM	HWM - B	HVM	TVM	GDM	GM	GDS
Impeller Type	Central/Off center Baffles: 0/2/3/4 Blades: 2/3/4 Stages: 1 - x	Central/Off center Baffles: 0/2/3/4 Blades: 2/3/4 Stages: 1 - x	Central Baffles: 2/4 Blades: 3/4 Stages: 1 - x	Central Baffles: Ortada 2 Blades: 2	Central/Off center Baffles: 2/4 Blades: 2 Stages: 1 - x	Central Baffles: 2/4 Blades: 6 Stages: 1 - 2	Central Baffles: 2/4 Stages: GDS veya HWM ile	Central Baffles: 2/4 Blades: 3 Stages: 1 - x
Flow Direction	Axial/Radial	Axial/Radial	Axial	Axial / possitive displacement	Axial/Radial	Radial	Radial	Axial/Radial
Blending	● ● ●	● ● ●	● ● ●	● ● ●	● ● ●	●		● ●
Suspension	● ● ●	● ● ●	● ●		● ● ●	●		● ●
Dispersion	● ●	●			●			
Heat Transfer	● ●	● ●	● ●	● ● ●	● ●	● ● ●	● ●	● ● ●
Gassing	●	●	●			● ● ●	● ● ●	● ● ●
Viscosity Range	≤ 40,000 [mPas]	≤ 37,000 [mPas]	≤ 100,000 [mPas]	≤ 1,000,000 [mPas]	≤ 20,000 [mPas]	≤ 10,000 [mPas]	≤ 2,000 [mPas]	≤ 10,000 [mPas]
Features	Universal mixing impeller for a wide viscosity range	A wide viscosity universal for range mixing impeller Variable wing angles (standard of 23° and 55° versions)	Low shear mixing Homogeneous energy distribution Even under gaseous conditions, reliable suspension	High viscosity and non-Newtonian short for fluids mixing times - Both pumping directions also possible - Low to high viscosity processes	Homogeneous suspension excellent axial pumping speeds High axial speeds, a multi-stage a virtual pull with setup can create pipe	Gas tube or sparger ring primary gas distributor high gas flow powerful even at speed dispersion performance	Through hollow shaft spontaneous gassing high performance in gas-liquid reactors with GDS or HWM combined - Very high mass transfer	- High local shear rates - Strong radial and combines axial flows Good gas distribution - High overflow limit, power in terms of consumption stable operation
Applications	Polymerization (suspension / pearl / emulsion), leaching, crystallization, precipitation, storage tanks	Polymerization (suspension/ emulsion), leaching, crystallization, precipitation ,storage tanks)	Bio-leaching, fermentation, polymerization, precipitation, crystallization	High viscosity adhesives, polymerization (batch/ solution),rubbers, creams, mascara, sealants, grease, ointments etc.	Polymerization (suspension), crystallization, precipitation	Fermentation, hydrogenation, oxidation, alkoxylation, hydroformulation, carboxylation	Polymerization (suspension/ emulsion), leaching, crystallization, precipitation ,storage tanks)	Fermentation, biological leaching, atmospheric leaching
Diameter Ratio	0.3 – 0.7 [d1 /d2]	0.3 – 0.7 [d1 /d2]	0.3 – 0.96 [d1 /d2]	0.3 – 0.95 [d1 /d2]	0.05 – 0.5 [d1 /d2]	0.2 – 0.6 [d1 /d2]	0.2 – 0.5 [d1 /d2]	0.2 – 0.7 [d1 /d2]
Rotation Speed	Medium	Medium	Medium	Low	High	High	High	High