

# BRAKING CARRIAGE

for overhead monorails of heavy type  
type **BT30**

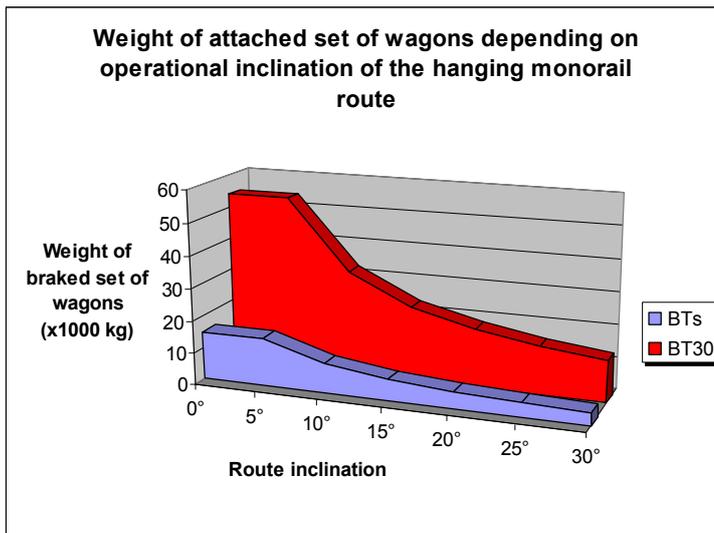


Braking carriage of type **BT30** is mechanical and hydraulic self-supporting emergency braking equipment with continuous braking effect designed for operation on a heavy-duty suspended track (transport track in the form of a single rail track consisting of sections of loadbearing profiles I155 or equivalent profiles, anchored to the installed mine supports or bolts with sufficient loadbearing capacity in the workings driven in solid rock (e.g., **ZD24,A,B,C,D/130**) for **special transport of cargo with excessive weight** when transporting on cable rope, suspended locomotive or by another traction vehicle. The function of the braking carriage consists in securing the train set and its parts (loadbearing carriages, lifting equipment, cargo, etc.) against spontaneous movement and operation safety risk by clamping the track section rib with the jaws equipped with sharp-edged teeth made of hard metal when the train set exceeds the preset transport speed. The braking trolley is connected with the train set by means of special connecting bars.



## Technical Data:

- Operational velocity	0 - 2 m/s
- Maximum speed for giving the order to brake	3,2 ±4% m/s
- Maximum route inclination	30°
- Minimum static braking force	150 kN
- Maximum braking stopping distance under a load as per the Graph	11 m
- Weight	250 kg
- Working environment with dangerous atmospheric conditions as per the standard ČSN EN 1127-2	2



Route inclination	Max. weight of braked set of wagons (x1000kg)	
	BTs	BT30 4xBTs
0°	15	54
5°	15	54
10°	9,2	32,5
15°	6,7	23,3
20°	5,2	18,3
25°	4,3	15,1
30°	3,7	13

## Benefits of the new braking carriage BT30 compared with the standard type BTs:

- braking effect is more than three times higher, i.e.: 1x BT30 will replace 4x BTs=QUATRO
  - cost effective: the price is lower by 35% (cheaper than 3xBTs=TRIO)
  - lower transport costs: BT30=250kg / 4xBTs=800kg
  - shorter train set: length of BT30=0,7m / 4xBTs-QUATRO=3,7m

In order to allow special transport of exceptionally heavy pieces of cargo it is possible to couple two or more braking trolleys **BT30** in accordance with the allowed loadbearing capacity of the suspended track.