

**DUFONEV**

**Debris, concrete material  
and gravel aggregate  
recycling**

**Vlastimil Ponča**

# Recycling – what it is?

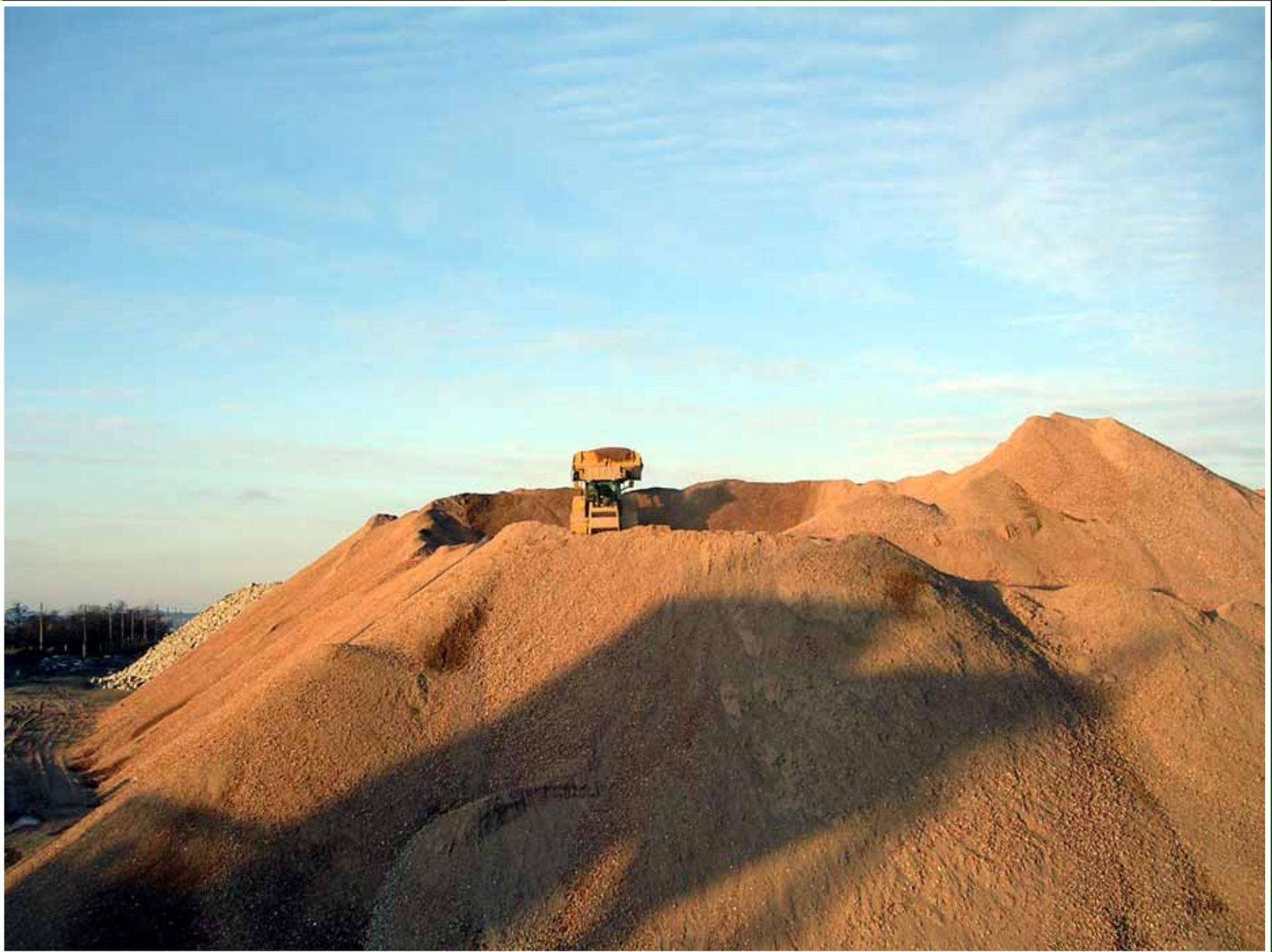
- Recycling is recovery of waste material for new - full-valued product.
- There is a huge saving of natural resources in the case of debris, concrete material and gravel aggregate recycling from the road demolition.

# Company **DUFONEV** recycling area

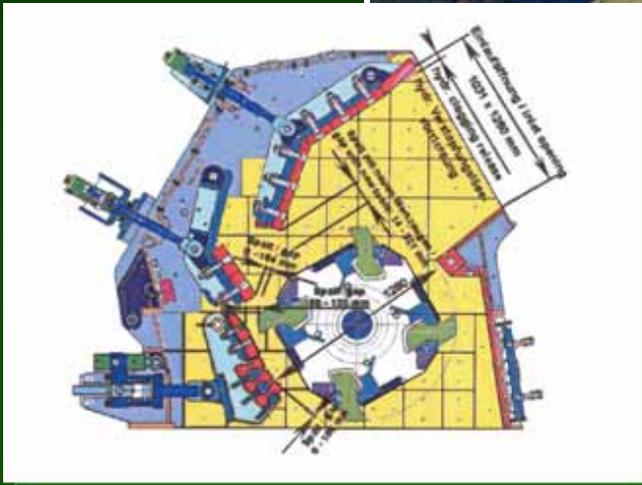


# Recycling technological process

- Waste material is sorted by a originator, in accordance with the waste catalogue numbers.
- Additions, negatively influencing output quality of recycled product are separated on the temporary heap.
- Material is crushed in the impact crusher.
- Recycled product is finally treated from the additions, homogenised and sorted into the fractions – in accordance with customer requirements or estimated re-use.
- Recycled material is used for constructions or in the new products.



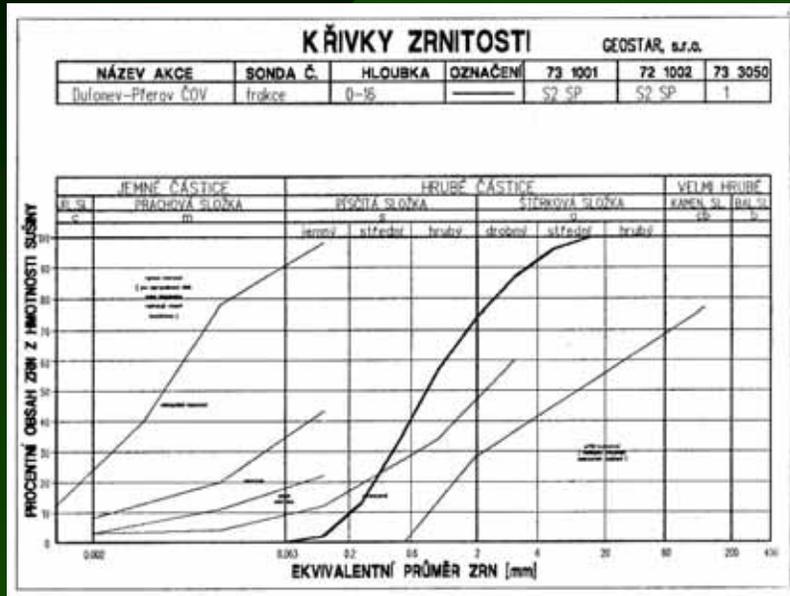
# Company **DUFONEV** recycling technology



**Rotation impact crusher SBM - type RCL 1232 E**

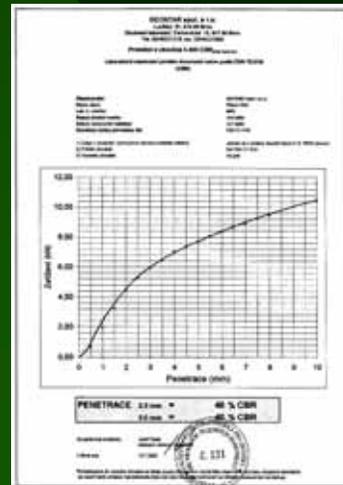
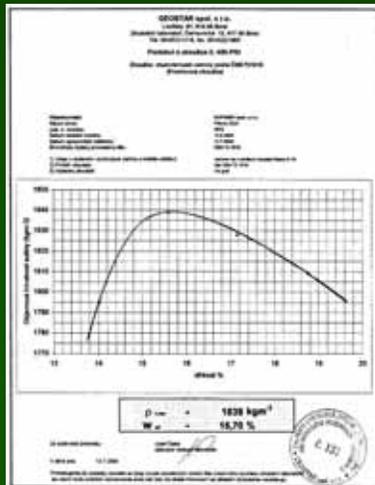


# Recycled material testing



## Dufonev-Přerov ČOV SR 0-16

Ozn. síť		
16		100
8		96,7
4		87,68
2		74,84
1		57,97
0,5		34,93
0,25		13,54
0,125		2,25
0,063		0,19
$w_L$	%	-
$I_p$	%	-
$CBR_{před\ sat.}$	%	40
$CBR_{po\ sat.}$	%	25
$\rho_{d,max}$	$kgm^{-3}$	1839
$w_{opt}$	%	15,70
$w_{př}$	%	-
ciz.složky	%	0,00



Recycled material is tested on the same level like products from the natural resources.

# Recycled material application for constructions



# Recycled material application in the new products



Successful application of the recycled material in the new products has company FINO, Czech Republic.



# Summary



- **Recycling is ecological and economical.**
- **The right way for saving of natural resources.**
- **The right way for decrease of dumping waste disposal.**
- **Fully in accordance with the sustainable development theory.**