

Steel and iron industry – cement works - mining – sand and gravel conveying – coal-fired power plants - foundries – sugar factories - refineries – ready-mix concrete - agriculture

## Wear protection with *A.S.S.* compound plates



### Quarrying, producing and processing of minerals.



Manufacturing, processing and recycling asphalt and concrete.



Hard facing, regenerating and repair services.



A.S.S. compound plates are two-layer-plates. A hard layer with an extremely high proportion of carbide is applied to a basic plate (i.e. St.37). Depending on the type of alloy, these carbides are formed using chrome, tungsten, niobium, vanadium or boride.

Our standard type (ASS 550) is composed similar to chrome mould casting known for its very good wear characteristics. It contains a considerably higher amount of primary carbide and thus is even more wear resistant.

For even higher demands, alloys are combined with further additives.

Small flaws in the hard layer are typical for these plates. These rips are necessary (stress relief) and do not affect the basic material.

Our processing procedure is fully automatic and thus guarantees constant quality of the hard layer. (lowest possible blending with the basic material.)

The range of A.S.S. compound plates offers excellent

protection against abrasion, erosion, shock and percussion. Depending on the type of alloy, also available in

combination with high temperatures.

The basic material can also be customised according to the requirements of the individual area of application.



#### Standard measurements [mm]:

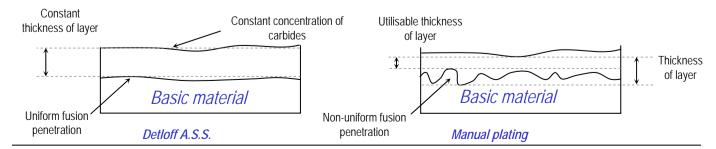
Plate format [mm]	1000 x 2000	1250 x 2500	1500 x 3000
usable	850 x 1850	1100 x 2300	1300 x 2800
area [mm]	1,57 m²	2,53 m²	3,64 m²

Customised sizes on demand

	Alloys:	A.S.S. 500	A.S.S. 550	A.S.S. 555	A.S.S. 600	A.S.S. 650	A.S.S. 700
1	11093.	Chrome carbide and specified carbides					Wolfram
		Chiome carbide and specified carbides					carbides
	Hardness HRc	55-58	58-60	60-62	61-63	62-64	63-66
	T° max	300°C	300°C	400°C	400°C	750°C	800°C
	Main areas of		Abrasion	Abrasion	Erosion	Erosion Shock	Erosion
	application	for price	Shock	Erosion	LIGGION	Temperature	2.001011

Standard thickness [mm] :	5 + 3	8 + 5	10 + 5	15 + 5
	6 + 4	8 + 8	10 + 10	15 + 10

#### Homogeneous hard layer:



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#### Advantages at a glance:

**Profitability:** Purchase prices alone do not designate the profitability of a compound plate.

*A.S.S.* compound plates offer optimal protection against wear and erosion.

The basic material is very weldable and facilitates simple fixation.



Ventilator: blade wheel



The application of *A.S.S.* compound plates ensures a considerably higher tool life as compared to other materials used for wear protection, such as sheet steel, casts or synthetic materials. Further improvement of profitability is guaranteed by saving time on

Ventilator: detail

#### Production options:



Screen

Warping: Canting, rolling (warm or cold)



**Cutting :** Excellent cuts are achieved by plasma cutting. Jet cutting produces even more precise outlines, small holes and penetration.



Clinker tubes

- > With steel-plated counter-sunk screws and fitting sinkhole rings welded into the compound plate
  - > With welded screw bolt at the back
  - > By welding or other mechanical mounting

# Development and construction from the same source !

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Sinkhole ring

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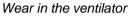
Mounting:

#### Development and research:

We constantly inspect and improve construction under the aspects of wear.

Our expert knowledge of wear-resistant materials quickly leads to the best possible solution for you.









Cells of a sinter cooler

We analyse the worn component and find the optimal solution.



#### Applications :

Our products have stood the test in many industry sectors and the most diverse applications. Wherever materials prone to wear are conveyed, moved, reduced to small pieces, separated, consolidated, dried or processed in any other way : Examples of use:



Machined A.S.S.parts

- Separators
- Ventilators
- Crushers / mills
- Dehumidifiers
- Sifters
- Mixers
- Pumps
- Conveying pipelines
- Extruders



#### Further materials from our house:

- Plates with a hardness of 250-400-500 HB
- DE wear-resistant casts
- DE heat-resistant casts
- CC surfaces carbide coated surfaces
- EPO-SiC polymer-ceramics (usable for priming)
- EPO-CER polymer-ceramics casts
- PUR, PE synthetic materials
- Arc-Metall spray coatings
- Sinter ceramics
- Hard metals (Tungsten carbide)

