

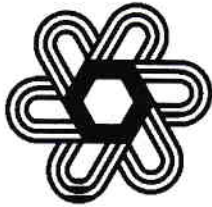
**"ITEM - Consult" Ltd. Sofia 1220,
bul. Istoriq Slavqnbulgarska. № 8**

**ECODESIGN REQUIREMENTS FOR SOLID FUEL BOILERS ACCORDING TO
COMMISSION REGULATION (EU) 2015/1189 IMPLEMENTING DIRECTIVE
2009/125/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

№DI-342/18.10.2019

| | |
|--|-----------------------------|
| Trade mark: | „Mareli Systems” Ltd |
| Model: | SBN 18 |
| Stoking mode: | Automatic |
| Condensing boiler: | No |
| Solid fuel cogeneration boiler: | Combination boiler: |

| Fuel | Preferred fuel (only one) | Other suitable fuel(s) | η_s (%) | Seasonal space heating emissions | | | |
|--|---------------------------|------------------------|--------------|---|------|--------|-----------------|
| | | | | PM | OGC | CO | NO _x |
| | | | | Mg/m ³ at 10% O ₂ | | | |
| Log wood, moisture content $\leq 25\%$ | no | no | | | | | |
| Chipped wood, moisture content 15-35% | no | no | | | | | |
| Chipped wood, moisture content $> 35\%$ | no | no | | | | | |
| Compressed wood in the form of pellets or briquettes | yes | no | 85,67 | 12,37 | 5,19 | 113.81 | 103.62 |
| Sawdust, moisture content $\leq 50\%$ | no | no | | | | | |
| Non-woody biomass | no | no | | | | | |
| Bituminous coal | no | no | | | | | |
| Brown coal (including briquettes) | no | no | | | | | |
| Coke | no | no | | | | | |
| Anthracite | no | no | | | | | |
| Blended fossil fuel briquettes | no | no | | | | | |
| Other fossil fuel | no | no | | | | | |
| Blended biomass (30-70%) fossil fuel briquettes | no | no | | | | | |
| Other blend of biomass and fossil fuel | no | no | | | | | |



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Characteristics when operating with the preferred fuel only:

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|---------------|-------|------|---|-------------|-------|------|
| Useful heat output | | | | Useful efficiency | | | |
| At rated heat output | P_n | 18,82 | kW | At rated heat output | η_n | 88,31 | % |
| At (30%/50%) of rated heat output if it's applicable | P_p | 5,46 | kW | At (30%/50%) of rated output if applicable | η_p | 89,23 | % |
| For solid fuel cogeneration boilers: Electrical efficiency | | | | Auxiliary electricity consumption | | | |
| At rated heat output | $\eta_{el,n}$ | N.A. | % | At rated heat output | $e_{l,max}$ | 0,014 | kW |
| | | | | At (30%/50%) of rated output if applicable | $e_{l,min}$ | 0,008 | kW |
| | | | | Of incorporated secondary emission abatement equipment, if applicable | | N.A. | kW |
| | | | | In standby mode | P_{SB} | 0,003 | kW |

CONCLUSION:

Solid fuel boiler with pellet burner „SBN 18” MEET THE REQUIREMENTS OF Annex II „Ecodesign Requirements” of REGULATION (EU) 2015/1189.

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|-----------------------------|---|
| Contact details | Name and address of the manufacturer or its authorised representative |
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