**Formler anvendt i ”Smoke unit converter”**

I nedenstående udledes formlerne, der er anvendt til at konvertere mellem de enkelte ”smoke units”. Alle ligningshenvisninger er en reference til ”Optical smoke units and smoke potential of different products”.

**Nomenclature:**

|  |  |  |
| --- | --- | --- |
| **Term** | **Description** | **Unit** |
|  | Smoke potential, linked to amount of burned fuel |  |
|  | Measured smoke production |  |
|  | Smoke potential used in Argos, linked to Rate of Heat Release |  |
|  | Soot yield |  |
|  | Visibility with a constant Rate of Heat Release |  |
|  | Visibility with a T-squared Rate of Heat Release |  |
|  |  |  |
|  | Rate of Heat Release |  |
|  | Same as extinction coefficient |  |
|  | Specific enthalpy for ambient air |  |
|  | Lower heat of combustion (effective heat of combustion) |  |
|  | Ambient air density |  |
|  | The volume of the rum |  |
|  | Time duration from the start of the fire |  |

**Conversion to :**

|  |  |  |
| --- | --- | --- |
| From |  | (15) + side 8 |
| From |  | (16) |
| From |  | (15) |

**Conversion to :**

|  |  |  |
| --- | --- | --- |
| From |  | Side 8 |
| From |  | (14) |
| From |  | Omstruk. af  (15) |

**Conversion to :**

|  |  |  |
| --- | --- | --- |
| From |  | Omstruk. af Side 8 |
| From |  | Omstruk. af  (14) + side 8 |
| From |  | Omstruk. af  (15) + side 8 |

**Conversion to :**

|  |  |  |
| --- | --- | --- |
| From |  | Omstruk. af (15) og (16) |
| From |  | Omstruk. af  (14) + side 8 |
| From |  | Omstruk. af  (16) |

**Conversion to :**

|  |  |  |
| --- | --- | --- |
| From |  | Omstruk. af  (15) + side 9 |
| From |  | Omstruk. af  (16) + side 9 |
| From |  | Side 9 |
| From |  | Omstruk. af  (15) + side 8, 9 |

**Conversion to :**

|  |  |  |
| --- | --- | --- |
| From |  | Omstruk. af  (15) + side 10 |
| From |  | Omstruk. af  (16) + side 10 |
| From |  | Side 10 |
| From |  | Omstruk. af  (15) + side 8, 10 |