

M A S TER C A T ALO G

## HAIMER.



ISOG GRINDING WHEEL ADAPTER HSK-F50
(WITH ACCESS HOLE) Ø 20 MM FOR SPACERS Ø 40 MM


Use:
Grinding wheel adapter HSK-F50 (with access hole) / $\varnothing 20 \mathrm{~mm}$ suitable
for ISOG tool grinding machines for spacers $\emptyset 40 \mathrm{~mm}$
Delivery:
Spacer pack, clamping nut, sealing pin, lock plate

| Clamping | $\emptyset \mathrm{d}$ [mm] | 20 |  |
| :---: | :---: | :---: | :---: |
| Length A [mm] |  | 38 |  |
| Order No. | $\varnothing \mathrm{D}[\mathrm{mm}]$ <br> L [mm] <br> F50.160.20.3 <br> incl. spacers +1 sealing pin ( $2 \times \mathrm{L}=12,1 \times \mathrm{L}=3[\mathrm{~mm}]$ ) | $\begin{aligned} & 40 \\ & 50 \end{aligned}$ |  |
| Length A [mm] |  | 58 |  |
| Order No. | $\varnothing D[m m]$ L [mm] <br> F50.163.20.3 <br> incl. spacers +1 sealing pin ( $2 \times \mathrm{L}=12,1 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]$ ) | $\begin{aligned} & 40 \\ & 60 \end{aligned}$ |  |
| Length A [mm] |  | 58 |  |
| Order No. | $\varnothing D[m m]$ L [mm] <br> F50.161.20.3 <br> incl. spacers +1 sealing pin ( $3 \times \mathrm{L}=12,2 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]$ ) | $\begin{aligned} & 40 \\ & 90 \end{aligned}$ |  |



UWS (REINECKER) GRINDING WHEEL ADAPTER HSK-E50 (WITH ACCESS HOLE) Ø 20 MM FOR SPACERS Ø 50 MM


Use:
Grinding wheel adapter HSK-E50 (with access hole) / $\varnothing 20 \mathrm{~mm}$ suitable for Reinecker tool grinding machines for spacers $\emptyset 50 \mathrm{~mm}$

Delivery:
Spacer pack, clamping nut

| Clamping | Ø d [mm] | 20 |  |
| :---: | :---: | :---: | :---: |
| Length A [mm] |  | 26 |  |
| Order No. | $\varnothing$ D [mm] L [mm] <br> E50.160.20.2 <br> Incl. spacers $\text { ( } 2 \times \mathrm{L}=12,2 \times \mathrm{L}=3[\mathrm{~mm}] \text { ) }$ | $\begin{aligned} & 50 \\ & 49 \end{aligned}$ |  |
| Length A [mm] |  | 26 |  |
| Order No. | $\varnothing$ D [mm] L [mm] <br> E50.163.20.2 <br> Incl. spacers $\text { ( } 3 \times \mathrm{L}=12,2 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}])$ | $\begin{aligned} & 50 \\ & 74 \end{aligned}$ |  |
| Length A [mm] |  | 26 |  |
| Order No. | $\varnothing$ D [mm] L [mm] E50.161.20.2 <br> Incl. spacers ( $4 x \mathrm{~L}=12,3 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]$ ) | $\begin{aligned} & 50 \\ & 109 \end{aligned}$ |  |


| Accessories |  |  |  |
| :---: | :---: | :---: | :---: |
| Spacers $\emptyset 50 \mathrm{~mm}$ |  |  |  |
| Length L [mm] Order No. | 999001-1139 | $\begin{aligned} & 3 \\ & { }^{2} 1 \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1140 | $\begin{aligned} & { }^{*} 1 \\ & { }^{1} \\ & \hline \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1138 | $\begin{aligned} & 12 \\ & \text { *2 } \end{aligned}$ | $\square$ |
| Clamping nut |  |  |  |
| Thread Order No. | 915005-0001 | M20x1.5 |  |
| Set of balancing screws |  |  |  |
| Order No. | 80.203 .00 |  |  |

ROLLOMATIC GRINDING WHEEL ADAPTER HSK-E50 (Ø 20 MM WITH ACCESS HOLE) FOR SPACERS Ø 50 MM


Use:
Grinding wheel adapter HSK-E50 (with access hole) / $\varnothing 20 \mathrm{~mm}$ suitable for Rollomatic tool grinding machines for spacers $\varnothing 50 \mathrm{~mm}$

Delivery:
Spacer pack, clamping nut

| Clamping | ø d [mm] | 20 |  |
| :---: | :---: | :---: | :---: |
| Length A [mm] |  | 26 |  |
| Order No. | $\varnothing$ D [mm] L [mm] E50.160.20.1 <br> Incl. spacers (2x L=12, 2x L=3 [mm]) | $\begin{aligned} & 50 \\ & 49 \end{aligned}$ |  |
| Length A [mm] |  | 26 |  |
| Order No. | $\varnothing$ D [mm] L [mm] E50.163.20.1 <br> Incl. spacers $\text { ( } 3 \times \mathrm{L}=12,2 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}])$ | $\begin{aligned} & 50 \\ & 81 \end{aligned}$ |  |


| Accessories |  |  |  |
| :---: | :---: | :---: | :---: |
| Spacers Ø 50 mm |  |  |  |
| Length L [mm] Order No. | 999001-1139 | $\begin{aligned} & 3 \\ & { }^{3} 1 \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1140 | $\begin{aligned} & \hline 6 \\ & { }^{*} 1 \\ & \hline \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1138 | $\begin{aligned} & 12 \\ & * 2 \end{aligned}$ | $15$ |
| Clamping nut |  |  |  |
| Thread Order No. | 915005-0001 | M20x1.5 | (-) |
| Set of balancing screws |  |  |  |
| Order No. | 80.203 .00 |  |  |

WALTER GRINDING WHEEL ADAPTER HSK-C50 Ø 20 MM FOR SPACERS Ø 50 MM


Use:
Grinding wheel adapter HSK-C50 / $\varnothing 20 \mathrm{~mm}$ suitable for Walter tool grinding
machines for spacers $\varnothing 50 \mathrm{~mm}$
Delivery:
Spacer pack, clamping nut, lock plate

| Clamping | Ø d [mm] | 20 |  |
| :---: | :---: | :---: | :---: |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```\emptyset [mm] L [mm] C50.165.20.4 (1x L=12, 1x L=3 [mm])``` | $\begin{aligned} & 50 \\ & 40 \end{aligned}$ |  |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```\(\varnothing\) D [mm] L [mm] C50.160.20.4 ( \(2 \times \mathrm{L}=12,1 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]\) )``` | $\begin{aligned} & 50 \\ & 60 \end{aligned}$ |  |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```Ø D [mm] L [mm] C50.163.20.4 ( \(3 \times \mathrm{L}=12,2 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]\) )``` | $\begin{aligned} & 50 \\ & 85 \end{aligned}$ |  |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```\(\varnothing D[\mathrm{~mm}]\) L [mm] C50.161.20.4 (3x \(\mathrm{L}=12,3 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]\) )``` | $\begin{aligned} & 50 \\ & 100 \end{aligned}$ |  |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```\emptysetD[mm] L [mm] C50.167.20.4 (4x L=12, 3x L=6, 2x L=3 [mm)``` | $\begin{aligned} & 50 \\ & 120 \end{aligned}$ |  |


| Accessories |  |  |  |
| :---: | :---: | :---: | :---: |
| Spacers $\varnothing 50 \mathrm{~mm}$ |  |  |  |
| Length L [mm] Order No. | 999001-1139 | $\begin{aligned} & 3 \\ & { }^{3} 1 \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1140 | $\begin{aligned} & 6 \\ & { }^{*} 1 \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1138 | $\begin{aligned} & 12 \\ & * 2 \end{aligned}$ | $\square$ |
| Lock plate |  |  |  |
| Length L [mm] Order No. | 999001-1134 | 0x1.5 |  |
| Clamping nut |  |  |  |
| Thread Order No. | 915005-0004 |  |  |
| Set of balancing screws |  |  |  |
| Order No. | 80.203 .00 |  |  |

WALTER GRINDING WHEEL ADAPTER Z50 Ø 20 MM FOR SPACERS Ø 50 MM


CERTIFICATE OF QUALITY

- All functional surfaces fine machined

V Body with balancing threads
V Balanced

Use:
Grinding wheel adapter $Z 50$ / Ø 20 mm suitable for Walter tool grinding machines for spacers Ø 50 mm

Delivery:
Spacer pack, clamping nut, lock plate, thread piece, cylinder screw, thread pin

| Clamping | Ø d [mm] | 20 |  |
| :---: | :---: | :---: | :---: |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```\emptyset D [mm] L [mm] Z50.165.20.5 (1x L=12, 1x L=3 [mm])``` | $\begin{aligned} & 50 \\ & 40 \end{aligned}$ |  |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```\emptyset D [mm] L [mm] Z50.160.20.5 (2xL=12, 1\timesL=6, 2x L=3[mm])``` | $\begin{aligned} & 50 \\ & 60 \end{aligned}$ |  |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```Ø D [mm] L [mm] Z50.163.20.5 ( \(3 \times \mathrm{L}=12,2 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]\) )``` | $\begin{aligned} & 50 \\ & 85 \end{aligned}$ |  |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```\emptyset D [mm] L [mm] Z50.161.20.5 (3x L=12,3x L=6, 2x L=3[mm])``` | $\begin{aligned} & 50 \\ & 100 \end{aligned}$ |  |
| Length A [mm] |  | 55 |  |
| Order No. Incl. spacers | ```\emptyset D [mm] L [mm] Z50.167.20.5 (4x L=12,3xL=6, 2x L=3[mm])``` | $\begin{aligned} & 50 \\ & 120 \end{aligned}$ |  |


| Accessories |  |  |  |
| :---: | :---: | :---: | :---: |
| Spacers 050 mm |  |  |  |
| Length L [mm] Order No. | 999001-1139 | $\begin{aligned} & 3 \\ & { }^{*} 1 \\ & \hline \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1140 | $\begin{aligned} & 6 \\ & { }^{\star} 1 \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1138 | $\begin{aligned} & 12 \\ & * 2 \end{aligned}$ | 1 |
| Lock plate |  |  |  |
| Length L [mm] Order No. | 999001-1134 | $35 \times 20 \times 1.5$ |  |
| Clamping nut |  |  |  |
| Thread Order No. | 915005-0004 | M20x1 |  |
| Set of balancing screws |  |  |  |
| Order No. | 80.203 .00 |  |  |

* $1=$ without balancing thread *2 $=$ with balancing thread See page 521 for additional spacers

SAACKE/VOLLMER GRINDING WHEEL ADAPTER HSK-C50 (WITH GROOVES FOR TOOL CHANGER) Ø 20 MM FOR SPACERS Ø 50 MM


Use:
Grinding wheel adapter HSK-C50 (with gripper groove for tool changer) /
$\varnothing 20$ mm suitable for Saacke and Vollmer tool grinding machines for spacers
$\varnothing 50 \mathrm{~mm}$
Delivery:
Spacer pack, clamping nut, lock plate

| Clamping | Ø d [mm] | 20 |  |
| :---: | :---: | :---: | :---: |
| Length A [mm] |  | 40 |  |
| Order No. Incl. spacers | ```\emptyset [mm] L [mm] C50.165.20.6 (1x L=12, 1x L=3 [mm])``` | $\begin{aligned} & 40 \\ & 40 \end{aligned}$ |  |
| Length A [mm] |  | 40 |  |
| Order No. Incl. spacers | ```\(\varnothing\) D [mm] L [mm] C50.160.20.6 ( \(2 \times \mathrm{L}=12,1 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]\) )``` | $\begin{aligned} & 40 \\ & 60 \end{aligned}$ |  |
| Length A [mm] |  | 40 |  |
| Order No. Incl. spacers | ```Ø D [mm] L [mm] C50.168.20.6 ( \(3 \times \mathrm{L}=12,2 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]\) )``` | $\begin{aligned} & 40 \\ & 75 \end{aligned}$ |  |
| Length A [mm] |  | 40 |  |
| Order No. Incl. spacers | ```\(\varnothing\) D [mm] L [mm] C50.163.20.6 ( \(3 \times \mathrm{L}=12,2 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]\) )``` | $\begin{aligned} & 40 \\ & 85 \end{aligned}$ |  |
| Length A [mm] |  | 40 |  |
| Order No. Incl. spacers | ```\emptysetD[mm] L [mm] C50.161.20.6 (3x L=12, 3x L=6, 2x L=3 [mm])``` | $\begin{aligned} & 40 \\ & 100 \end{aligned}$ | $9 \cdot[([([)$ |


| Accessories |
| :--- | :--- | :--- |
| Spacers $\varnothing 50 \mathrm{~mm}$ | (mm]

[^0]See page 521 for additional spacers

SCHÜTTE GRINDING WHEEL ADAPTER HSK-C50 (WITH GRIPPER GROOVE HSK-E50) Ø 20 MM FOR SPACERS Ø 50 MM



Use:
Grinding wheel adapter HSK-C50 (with gripper groove HSK-E50) / $\varnothing 20 \mathrm{~mm}$ suitable for Schütte tool grinding machines ( 205 series) for spacers $\varnothing 50 \mathrm{~mm}$

Delivery:
Spacer pack, clamping nut, lock plate

| Clamping | $\emptyset \mathrm{d}[\mathrm{mm}]$ |
| :--- | :--- | :--- | :--- |
| Length $\mathrm{A}[\mathrm{mm}]$ |  |
|  | $\emptyset \mathrm{D}[\mathrm{mm}]$ |
| Order No . | $\mathrm{L}[\mathrm{mm}]$ |
| Incl. spacers |  |
| Length $\mathrm{A}[\mathrm{mm}]$ |  |


| Accessories |  |  |  |
| :---: | :---: | :---: | :---: |
| Spacers $\varnothing 50 \mathrm{~mm}$ |  |  |  |
| Length L [mm] Order No. | 999001-1139 | $\begin{aligned} & 3 \\ & { }_{*} 1 \\ & \hline \end{aligned}$ |  |
| Length L [mm] Order No. | $\begin{aligned} & \hline 6 \\ & 999001-1140 \end{aligned}$ | *1 |  |
| Length L [mm] Order No. | $\begin{aligned} & 12 \\ & 999001-1138 \end{aligned}$ | *2 | $\square$ |
| Lock plate |  |  |  |
| Length L [mm] Order No. | 999001-1134 | $35 \times 20 \times 1.5$ | $(\omega)$ |
| Clamping nut |  |  |  |
| Thread Order No. | 915005-0004 | M20x1 |  |
| Set of balancing screws |  |  |  |
| Order No. | 80.203 .00 |  |  |

SCHÜTTE GRINDING WHEEL ADAPTER HSK-E50 (WITH ACCESS BORE) Ø 20 MM FOR SPACERS Ø 50 MM

| CERTIFICATE OF QUALITY |
| :--- |
| $\boxed{ }$ All functional surfaces fine machined |
| $\boxed{ }$ More accurate than DIN |
| $\boxed{ }$ Body with balancing threads |
| $\boxed{ }$ Balanced |



Use:
Grinding wheel adapter HSK-E50 (with access bore) / $\varnothing 20 \mathrm{~mm}$ suitable for
Schütte tool grinding machines ( 305 series) for spacers $\varnothing 50 \mathrm{~mm}$

Delivery:
Spacer pack, clamping nut, lock plate

| Clamping | Ø d [mm] | 20 |  |
| :---: | :---: | :---: | :---: |
| Length A [mm] |  | 26 |  |
| Order No. Incl. spacers | ```\(\emptyset D[m m]\) L [mm] E50.165.20.8 ( \(1 \times \mathrm{L}=12,1 \times \mathrm{L}=3[\mathrm{~mm}]\) )``` | $\begin{aligned} & 50 \\ & 40 \end{aligned}$ |  |
| Length A [mm] |  | 26 |  |
| Order No. Incl. spacers | ```\(\emptyset \mathrm{D}\) [mm] L [mm] E50.160.20.8 ( \(2 \times \mathrm{L}=12,1 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}]\) )``` | $\begin{aligned} & 50 \\ & 55 \end{aligned}$ |  |
| Length A [mm] |  | 26 |  |
| Order No. Incl. spacers | $\varnothing \mathrm{D}[\mathrm{mm}]$ L [mm] <br> E50.163.20.8 $(3 \times \mathrm{L}=12,2 \times \mathrm{L}=6,2 \times \mathrm{L}=3[\mathrm{~mm}])$ | $\begin{aligned} & 50 \\ & 85 \end{aligned}$ |  |


| Accessories |  |  |  |
| :---: | :---: | :---: | :---: |
| Spacers $\emptyset 50 \mathrm{~mm}$ |  |  |  |
| Length L [mm] Order No. | 999001-1139 | $\begin{aligned} & 3 \\ & { }_{*} 1 \\ & \hline \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1140 | $\begin{aligned} & 6 \\ & { }^{*} 1 \end{aligned}$ |  |
| Length L [mm] Order No. | 999001-1138 | $\begin{aligned} & 12 \\ & * 2 \end{aligned}$ | 1 |
| Lock plate |  |  |  |
| Length L [mm] Order No. | 999001-1134 | $35 \times 20 \times 1.5$ | $(())$ |
| Clamping nut |  |  |  |
| Thread Order No. | 915005-0004 | M20x1 |  |
| Set of balancing screws |  |  |  |
| Order No. | 80.203 .00 |  |  |

* $1=$ without balancing thread *2= with balancing thread

See page $\mathbf{5 2 1}$ for additional spacers


[^0]:    * $1=$ without balancing thread *2= with balancing thread

